

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

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PUBLISHED AT 54 WALL STREET, NEW YORK.

Saturday, February 24, 1849.

LOCOMOTIVE FOR SALE. (NOW RUNNING.)

A Good Locomotive Engine and Tender in good running order, for sale low. Address
E. S. NORRIS,
Schenectady Locomotive Works,
Schenectady, N. Y.
February 24, 1849. 4t8

SCHENECTADY LOCOMOTIVE WORKS, SCHENECTADY, N. Y.

THE undersigned is prepared to execute orders for Locomotive Steam Engines and Tenders, and from long experience in building, can furnish machines of most superior workmanship. The Works are very large, and conveniently situated near the line of Railroad leading to Buffalo, and can furnish Locomotive Tenders and Railroad Machinery at short notice.
E. S. NORRIS.
February 24, 1849. 8t

PATENT OIL FOR MACHINERY. — THE
Subscribers are now prepared to supply "Devlan's Patent Oil" in any quantity; machinists, manufacturers, etc., are requested to call and examine the article. Certificates of its efficacy and superiority over all other oils, from several of our most extensive manufacturers are now in our possession.
ALSO,

OIL—Bleached and unbleached Winter, Solar, Elephant and Whale Oils; also light colored selected racked Whale Oil, suitable for retailing.
For sale by ALLEN & NEEDLES,
No. 22 and 23 S. Wharves, near Chestnut street,
Philadelphia.
February 24, 1849.

Union Canal Company.

The annual report of the Union Canal Company furnishes a highly satisfactory exhibit of the business of the past year. The total tonnage is 153,222 tons, showing an increase of 13,965 tons over the year 1847. There were 20,102 bbls. of flour transported: 314,068 bush. of grain, 72,671 tons coal, 32,625 bush. salt, and 81,365 bush. lime. The trade of the Susquehanna is annually and rapidly increasing; but the largest portion of it is diverted from this Canal by a long and circuitous route through two neighboring States. It is to be hoped that exertions will be made to have the Canal enlarged at an early period, throughout its entire length, so as to admit the passage of the Susquehanna and Juniata boats. This would not only bring an increased business to this route, but would materially increase the amount of tolls received by the Schuylkill Canal.

PARTICULAR NOTICE.

Some years ago a young man named Rider, or Ryder, left England for America. He has not been heard of by his surviving relatives, in England, for many years. Said Rider, if living, or his legal representatives, if he is dead, can hear something to their advantage by calling on the Editor of the Railroad Journal, 54 Wall-street, New-York.
Feb. 24th, 1849.

Canadian Railways.

At a meeting of the friends of different railway projects in Canada, last week, it was unanimously agreed to support a general bill authorizing the loan of the credit of the colony to the amount of two dollars per one expended by individual subscription on the great trunk lines between Lake Huron and Quebec, and between Montreal and Portland.

☞ The commercial news by the Europa are favorable to trade with this country. Money is abundant. Consols have reached 92½. Breadstuffs and provisions advancing. Iron more in demand. American securities in greater request.

☞ Intelligence by the Europa indicates a determination on the part of the British Government to persevere in their free trade policy, and abolish or modify the navigation acts.

☞ The Steamer United States has been sold to the government of Prussia.

☞ The Europa's news was telegraphed from St. John city to New York on Thursday evening.

Portsmouth & Concord Railroad.

We learn that at a meeting held in Portsmouth a few days since, arrangements were made and an agent appointed to contract forthwith for seven hundred and fifty tons of rails, to complete the road to Epping the coming season.

CORRECTION.—In the table, in our last paper, showing the number and length of railway in operation, some typographical errors occurred for want of proper correction of the proof. In the final aggregate, however, the sums were correctly added.—One or two errors might not be readily discovered, which we will name. The *Winchester and Potomac Railroad, in Virginia*, is 32 miles in length, and is so added, though it is stated in the list of roads at 76 miles. The number of miles opened in New Jersey, in 1848, is 36½ miles, instead of 35½ miles as stated in one part of our article.

Railway Progress.

The tables published in our two last numbers exhibit the extraordinary fact, that 6,421 miles of railway were in actual operation at the commencement of the year 1849, within the limits of the United States. This amount far exceeds that of any other nation, though the cost of their construction is much less per mile.

The Railways of the United States, including the cost of road and equipment, will not exceed \$30,000 per mile. The Railway of Canada average very nearly with the cost of those of our own country.—Those of Cuba were built at less expense, on account of the fact, that all railroad material and machinery are admitted free of duty.

It may be interesting, in this connection, to place in contrast, in the form of a tabular statement, the number of miles and cost, showing thereby the present condition of railways throughout the world.—The information in regard to English railways is taken from a great variety of sources, mostly official. The estimates for those in Canada and Cuba, are made up by gentlemen fully conversant with the condition of each. Our data in regard to the extent of railway on the Continent of Europe are principally obtained from the *Chemin de Fer* of Paris, the leading Railway Journal of France. The estimates of their cost are compiled by a comparison of various official returns. Our readers may therefore rely on the following table as more fully accurate than any before published on the subject.

| | Miles. | Cost per mile to Jan. 1, '49. | Total. |
|-------------------------|--------|-------------------------------|-----------------|
| United States..... | 6,421 | \$30,000 | \$192,630,000 |
| Canada | 54 | 30,000 | 1,620,000 |
| Cuba | 250 | 28,000 | 7,000,000 |
| Total in America, 6,725 | | | 200,250,000 |
| United Kingdom ... | 4,420 | 145,000 | \$640,900,000 |
| France | 1,250 | 110,000 | 137,500,000 |
| Germany | 3,370 | 50,000 | 168,500,000 |
| Belgium | 495½ | 80,000 | 39,640,000 |
| Holland | 162½ | 25,000 | 4,062,500 |
| Denmark & Holstein | 292 | 40,000 | 11,280,000 |
| Switzerland | 78 | 50,000 | 3,600,000 |
| Italy | 162½ | 90,000 | 14,625,000 |
| Russia | 113 | 60,000 | 6,780,000 |
| Poland | 187½ | 50,000 | 9,375,000 |
| Hungary | 157 | 50,000 | 7,850,000 |
| Total in Europe.. | 10,678 | | \$1,044,402,500 |
| Total | 17,403 | | \$1,244,652,500 |

The above embraces all the railways in operation, except a short line of 15 miles recently opened in Spain, from Barcelona to Mataro, from which no returns are obtained.

These vast sums above stated have all been expended for railways within the last twenty years.—It may be safely asserted that the roads now in progress, including all those which will be completed within the next five years, will represent an additional amount of capital equal to the sums expended upon those already finished. The speculative feeling of 1845, in England, pushed forward many schemes that have since been discarded: and the stringent law which required a deposit of 20 per cent of the capital before the taking effect of the grant of authority, to build, had the effect to reduce the number of speculative schemes at once. In no other country in Europe has the railway spirit exceeded the limits of legitimate speculation.

At the close of the year 1847, the railways built and in progress in the United Kingdom of Great Britain and Ireland, may be stated as follows:

| | Sq. mls. | Mls. of Railway. | Capital. |
|-------------------------|----------|------------------|-----------------|
| England & Wales, 57,068 | 8,796 | \$1,232,358,970 | |
| Scotland | 31,000 | 1,872 | 198,281,851 |
| Ireland | 32,433 | 1,813 | 137,346,492 |
| | 120,501 | 12,481 | \$1,567,887,013 |

The whole amount expended to the end of Sept., 1848, on all the railways of the United Kingdom, was £195,317,106—equal to \$837,522,108.

In France, at the close of the year 1846, the number of miles of railway regarded as in progress, including those already built, is stated at 3,841 English miles, requiring a capital of \$416,000,000 for their completion.

In Russia, 1,600 English miles of railway were in progress at the end of the year 1847, all of which are undertaken by the government, and are being urged rapidly toward completion. In the present condition of European affairs, it is not safe to hazard a conjecture as to the probable amount of railway expenditure during the present year; we therefore confine our estimates for the present to unfinished railways in progress in the

UNITED STATES.

Maine.—The *Atlantic and St. Lawrence* Railway is in progress to Paris, 47 miles from Portland; the iron is purchased, and it will be opened at an early day in the coming season to that point.

The *Androscoggin and Kennebec R.R.* is graded from Lewiston to Waterville, 48 mls., the iron pur-

chased, and the laying of the track going forward. It will be opened during the year 1849 the whole distance.

The *Kennebec and Portland* Railway is graded from North Yarmouth to Bath, 25 miles, the iron delivered, and the laying of the rails commenced at Bath, and it will be opened in 1849.

The *Buckfield Branch*, 13 miles, is partly graded, the iron contracted for, and the opening of the road in 1849 determined upon.

The *York and Cumberland* Railroad is under contract from Portland to South Berwick, 48 miles, where it is to connect with the Boston and Maine Railroad. The grading is in progress between Portland and Gorham, 10 miles, and a portion of the road is to be opened during the year 1849.

More than 100 mls. of new railway will, therefore, be opened in Maine the present year.

New Hampshire.—The *Boston, Concord and Montreal* Road Company has its charter extended, authorising it to continue its line to Lancaster, in Coos County, making it the grand central line of communication for the State. It is the intention of the Directors to open it to Rumney the coming season.

The *Portsmouth and Concord* Railroad is graded to Epping, and the rails laid to within 3½ miles of the same place, and it is to be opened to this point in the spring. Distance from Portsmouth to Concord, 40 miles; to Epping about 20 miles.

The *Concord and Claremont* Railroad is in rapid progress. Two thousand tons of iron have been recently purchased for it, to be laid the present year.

The *Contoocook Valley* Railroad is in progress also, and the iron purchased to lay the rails from Contoocook to Hillsborough Bridge.

The *Manchester and Lawrence* Railroad is under contract the entire distance, 23½ miles, and is to be opened the present year.

The *Portsmouth, Great Falls, and Conway* Railroad is just commenced upon, and is to be pushed to Rochester without delay.

Including the recent openings on the Sullivan and Cheshire Railroads, the amount of new road brought into use in New Hampshire in 1849, will exceed one hundred miles.

Vermont.—The *Central* Railroad is progressing between Northfield and Montpelier, and efforts are making to extend it to Burlington, 52 miles, from Northfield the present year.

The *Rutland and Burlington* Railroad was referred to in our paper of the 10th inst. The road is progressing, at both ends, with a view to its completion from Burlington to Bellows Falls in the course of the present year.

The *Vermont and Massachusetts* Railroad was to be opened at Brattleboro' the present week, and from thence to Bellows Falls, a distance of some 25 miles, a railroad is contemplated; thereby completing the line of railroad communication with this city, in the valley of the Connecticut, from Wells River to Hartford, and by the railroads between Hartford and New York.

The *Rutland and Whitehall* Railroad is soon to be commenced, a distance of 24 miles, so that by the close of the present year the line of railway between Burlington and New York, via Saratoga, Troy, and the Hudson River, may be counted upon as certain.

The assurances are, that nearly two hundred miles of new road will be opened in Vermont during the 1849.

Massachusetts.—The *Norfolk County* Railroad, 25 miles in length, is in progress, and a portion will be

opened during the coming month, and the whole distance during the year.

The *Fitchburg and Worcester* Railroad, 12 miles in all, is in progress.

The *Grand Junction* from East Boston to the Worcester Railroad, 6 miles, is rapidly progressing, which is to serve as a connecting line for all the great trunk roads leading into the city.

The *Vermont and Massachusetts* Railroad, after years of struggle and embarrassment, is now about completed to Brattleboro, and the people of that enterprising and beautiful village are the fair way of realizing the enjoyment of their long deferred wishes.

The new openings in Massachusetts in 1847 will probably reach 75 miles, under charters already granted, and then are movements for an extension of the *New Haven Canal* Railroad to the line of the *Western* Railroad, at Westfield, and for the extension of *Naugatuck* Railroad to the line of the *Western* Railroad at Pittsfield.

To be Continued.

MINING.

With regard to the amount of the production of the precious metals, M. Chevalier, one of the most distinguished statisticians in Europe, and probably the best authority in these matters of any man living, if we except Baron Humboldt, gives, as the result of his researches, the following calculation with respect to gold:—

America produces \$10,995,380

Europe " 895,660

Russia " 20,666,600

Africa & S. Asia, 11,711,000

\$43,568,580, equal to 138,360 lbs.

avoir.

The amount of silver produced, M. Chevalier estimates at 1,917,063 pounds avoir., including 218,750 for China, Japan, and the Indian Archipelago. Of the total quantity, America yields 1,345,412 lbs., against 1,968,750 at the commencement of the present century. At that time the production amounted to—

\$22,948,800 of Gold,
40,000,000 of Silver,

\$62,948,800

Whole value of Gold and Silver produced at the present time—

\$43,568,580 of Gold,
38,883,400 of Silver,

\$82,451,980

Showing a slight falling of in Silver, and a very large increase in Gold.

Wilmington and Manchester Railroad.

In a late number of the *Marion, S. C., Star* we find the following notice of contracts for grading on the southern end of the Wilmington and Manchester railroad:

"We understand that at the giving out of contracts at Gregg's store on the 1st inst. the entire distance from Lynch's Creek to the Pee Dee river was taken up at the estimates of the engineers. We are also informed that a good feeling was manifested, and quite a number of persons came forward to subscribe who had not done so previously, and several who had been subscribers increased the number of shares. The prospects of the company seem brighter now than at any previous period, and if the balance of the contracts are given out to the same energy and character, we have not the slightest doubt of its speedy completion. All the contractors will

be at work by the 1st of March. The surveying party of engineers reached the village from the river some days ago, having located the road to this place. They proceeded to the Little Pee Dee to select a proper location for crossing that river. From thence they will survey the line to this place, and put the remainder of the road under contract at as early a date as the estimates can be made up."

Patent Office Statistics.

We have received from Washington, a table setting forth in detail the number of patents of each class—the whole being divided into twenty-two—granted to each State from the year 1789 to 1849.—We give the aggregate as follows:—

| States | No. of Patents | States | No. of Patents |
|---------------------|----------------|---------------------------|----------------|
| Maine..... | 483 | Mississippi..... | 23 |
| New Hampshire..... | 297 | Louisiana..... | 77 |
| Vermont..... | 310 | Arkansas..... | 0 |
| Massachusetts..... | 2161 | Tennessee..... | 108 |
| Rhode Island..... | 234 | Kentucky..... | 185 |
| Connecticut..... | 1156 | Ohio..... | 749 |
| New York..... | 3382 | Michigan..... | 51 |
| New Jersey..... | 461 | Indiana..... | 114 |
| Pennsylvania..... | 2167 | Illinois..... | 71 |
| Delaware..... | 52 | Missouri..... | 40 |
| Maryland..... | 660 | Florida..... | 1 |
| Virginia..... | 631 | Texas..... | 4 |
| North Carolina..... | 137 | Iowa..... | 2 |
| South Carolina..... | 122 | Wisconsin..... | 8 |
| Georgia..... | 80 | District of Columbia..... | 224 |
| Alabama..... | 65 | | |

The following are the numbers granted during the same time to the principal cities:—

| | | | |
|---------------|------|-------------------|-----|
| Boston..... | 623 | Philadelphia..... | 916 |
| New York..... | 1687 | Baltimore..... | 430 |

These statements are somewhat curious, and may be regarded as indicative, to a certain extent, of the inventive genius of our people in different sections of our country.

[No one can fail to observe the important difference in the number of patents taken out by the free and slaveholding states. The whole number taken out by the people of the latter being only 2,273, which is little over those taken out in Massachusetts alone; and less, by upwards of a thousand, than the production of New York.]

The Michigan Central Railroad.

The Central Railroad Company, as we learn from the Detroit Daily Advertiser, have made arrangements to run two daily lines from Buffalo through to Chicago and Milwaukee, during the ensuing season of navigation. The cars will leave Detroit for New Buffalo, every morning and evening, and steamboats will run in connection with them, from Detroit to Buffalo, and from New Buffalo to Milwaukee and Chicago. The competition between this route and the Lake line will no doubt be spirited, and as usual, when there is competition, the public will be benefited.

Gas from Water.

This new discovery, which is being adopted very generally in some of the Lancashire towns, is exciting much attention in this neighborhood, and as many of our readers may not be enabled to view the apparatus at the Basford Iron Works, we give a short description of it. That now supplying Mr. Wakefield's works only occupies about five feet square, without the gasometer, but including the fire, and consist of two retorts, one occupied by charcoal and a hollow piece of perforated iron, and the other by a mass of chains. Two pipes and a small iron box act as purifiers. For lace gassing, &c., water, and water only, need be used; but where a brilliant light is required, as for factories, &c., a small quantity of oily matter (which Mr. Wakefield finds superior to rosin or tar) is added, and the result is, a gas more brilliant than that obtained from coal, and perfectly free from smell and dirt. The apparatus we have alluded to will produce 1,000

feet in ten hours, at an expense of less than 2s. 6d. would cost from £40 to £50; but one calculated for a private family would be put up for £10, including the license.—*Nottinghamshire Guardian*.

Railroad from Toronto to Lake Huron.

We learn from the Commercial Times, Oswego, that the Canadians contemplate building a Railroad from Toronto to Lake Huron, a distance of 75 miles. The petition for a charter is very numerously signed, and the parliament will no doubt grant it. It will afford facilities for travel and produce not heretofore possessed by them, and will be of great advantage to Oswego, as well as our own city. We congratulate our Oswego friends on this further prospect of building up the business of their city, and increasing its prosperity.—*Syracuse Star*.

Androscoggin Railroad.

A movement is in progress for opening a line of Road in Maine, called the new Androscoggin R. R., a distance of 22½ miles. The line of this road is to diverge from the Androscoggin and Kennebec road, where this latter road leaves the Androscoggin valley, and follows this valley in a northerly direction, so that in fact the Androscoggin railroad is a road for the accommodation of the Androscoggin valley between Lewiston Falls and Jay Bridge, a distance of about thirty miles, and from thence to be extended to Farmington, or such other points as the wants of the community demand.

The estimates made by a competent engineer place the cost of construction at less than \$15,000 per mile. The line is so nearly level and direct that the whole exceeds an air line by only seven-eighths of a mile.

Madison & Indianapolis Railroad.

The receipts of this road for the month of Jan., 1849, were..... \$28,500 00
For January, 1848..... 17,200 00

Increase in 1849..... \$11,300 00
Which is equal to 65 per cent.

The receipts for the months of November, December and January (1848 '49) last were. \$88,408 48
And for the same months of 1847 '48. 61,406 57

Increase this year..... \$27,001 91
Which is equal to 43 per cent.

Steamboats on the Western Waters.

The total number of boats now running upon all the streams emptying into the Mississippi, is 572.—The tonnage of these boats is 118,655 tons; their value is estimated at \$5,189,979; the yearly outlay at \$19,915,753; and annual earnings at \$17,428,840. The largest number of all the boats now running, it is said, *lose money*, while the entire capital is exhausted in four years.

"From Cairo to New Orleans by steamer the distance is 1012 miles; the time taken to traverse it is about ninety hours; the distance by the Mobile and Ohio Railroad is 470 miles; the time necessary to traverse it is only about twenty-four, being a distance of less than one-half; and the time only about one-fourth. The expense is also less in a similar proportion."—*Mobile Tribune*.

If a road can be made from Mobile to the mouth of the Ohio river, and not be more than 550 miles in length, it will command an immense trade and travel. It is to be hoped that the commendable efforts of Alabamians, to tap the business of the Upper Mississippi, may be successful. The exchanges that can be made between the products of the South and those of the North, will be highly advantageous to the people of both sections. It is expected that railroads will soon be constructed from Cairo in Il-

linois to Galena and Chicago. At the rate of travel indicated by the Tribune, in three days one can go from Mobile to Lake Michigan, or to the Falls of St. Anthony, as he may desire. From the Gulf of Mexico to Lake Superior will be but a step. Let iron bars bind the South and the North together in commercial and fraternal bonds a hundred fold stronger than all the factions in the Union.

West of England Steel Company.

SIR—In your Journal of the 14th inst. are a few remarks on a proposed new company for manufacturing steel, in the West of England, with peat and iron ore both found in that district. Although it is rather soon to prognosticate, before one has seen the prospectus, or knowing who any of the parties may be, yet it appears to me to be one of the most feasible speculations that has for a long time been proposed, and one, if carried out in an economical and business-like manner, may become a most profitable investment.—The fact that peat is a fuel with which iron is manufactured on the continent, is now becoming more generally known in England, and it is satisfactory to hear that enterprising individuals are availing themselves of this, to establish the manufacture of an article for which we are now entirely dependent on foreigners, and which we must have at any price; it is really a wonder that, hitherto, none have opened their eyes to the fact, that while we are annually exporting to Germany alone, upwards of 40,000 tons of inferior pig iron from Scotland, under the price of 45s per ton, we are, at the same time, importing above 20,000 tons of good bar iron from that country, Russia, and Sweden, a great portion exceeding £35 per ton, and this going on whilst we possess every requisite knowledge, capital, fuel, and minerals, for making iron at fourth the price, of equal quality to that for which so high a price is given. The charcoal in many districts on the continent, requisite to make a ton of pig iron, costs upwards of £4; and this pig is refined and puddled with charcoal at the same dear rate, whilst sufficient peat-charcoal in Devonshire, will not cost £2 per ton of pig; and I well know, that in works using peat, 9 tons will puddle 10 tons of iron; so it is easy to perceive that the first-rate quality of iron may be made in the west of England, at a cheaper rate than on the continent, provided the ore is obtained at a moderate price.

Should the proposed company's object be to make steel direct from the ore, using the carbonate instead of the oxide of iron, they will still, in the price of fuel, have an advantage over our continental neighbors, as, doubtless, they will provide themselves with as experienced workmen, probably knowing that a very slight variation in the size of the furnace, or proportions of the ores, will cause to be produced cast-steel or cast-iron at pleasure. I make these observations, not from theory, but from many years' practice in erecting and working furnaces and charcoal forges, and should they be thought worthy a place in your Journal, they are at your service.—E. K. Jan. 17.—*Mining Journal*.

Extension of the Baltimore and Ohio Railroad.

In the haste with which our brief sketch of the remarks made by Mr. Swann, the President of the Baltimore and Ohio Railroad Company, at a meeting of the Board of Directors yesterday, were prepared, the points touched were so imperfectly stated, and the exact bearing of some of them not fully comprehended, that we are glad to have an opportunity to publish the following fuller report of the substance of his remarks, which has been prepared and handed to us by a member of the Board:

Mr. Swann stated that he had been engaged, almost without intermission, since his connection with this Company, in removing the obstacles in the way of the extension of the road. He had had many and serious difficulties to contend with.

The question of route had been finally disposed of, and, he had reason to believe, to the entire satisfaction of all interests. He was happy to congratulate the Board on the adjustment of this vexed question.

After disposing of this question of route, his attention had been directed to the relation in which we stood to the Chesapeake and Ohio Canal Company. The Canal claimed the right of prior location along the North Branch of the Potomac to the mouth of Savage. From the resolutions passed by the Canal Company, it would be seen that this difficulty had been satisfactorily arranged.

Mr. S. said that this was the last obstacle in the way of the prosecution of this road, and the period had now arrived when the road could proceed without further delay.

Mr. Swann said that the cost of the road to the Monongahela had been estimated at \$4,500,000. It might fall short of this amount, but he believed it would not exceed it.

At this point, the revenue of the road would be increased one-half, or \$2,153,743, being equal to 9 per cent., as estimated by the Chief Engineer.

The five per cent. Sterling Bonds could not fall short of \$2,700,000. The revenue of the road he would estimate at \$1,300,000 during the progress of the work, and he thought \$500,000 a moderate estimate for the citizens of Baltimore. This would accomplish the whole amount necessary to carry the road to the Monongahela river, supposing its revenue to keep up.

The road completed to the Monongahela, the entire debt applicable to the Main Stem, might be put down at \$3,200,000—this being the amount of the Sterling Bonds, which would remain as a perpetual loan to the Company. The Washington Branch would be ample security for the million loan, and the Bonds more recently issued.

The entire capital invested in the road at the Monongahela would be \$13,000,000, from which deducting the \$3,200,000 of debt, it would have upwards of \$9,800,000 as the basis of any future loans necessary to complete your connection with the Ohio river, besides the subscriptions of \$500,000 from the city of Wheeling.

The mail contract, on the completion of the road, would be equal to a capital of \$2,

000,000 at the present maximum of \$300 per mile. For this service there could be no rival.

The debt of the Company had been reduced to \$88,700. From the 1st of Oct. to the 1st of April the total obligations of the Company, including interest upon loans, amounted to \$300,000. Mr. Swann said that if no falling off should occur in the revenue during this and the succeeding month, the company would be out of debt the 1st of April or shortly thereafter.

Mr. Swann said that he had every confidence in being able to make the sterling bonds available to the Company. We had always relied upon them as the great source to which were to look, in the extension of the road. He had lost no time in communicating with capitalists abroad, in relation to those bonds. The result of this correspondence was a proposition for the absolute purchase of a portion of these bonds by one of the strongest houses abroad. This proposition was declined. Within a short time past, he was informed that an effort would be made at home, to purchase \$500,000 or \$1,000,000 of these bonds.

He had no doubt that an arrangement could be made, predicated on these bonds, which would enable the Company to move on without delay.

The road being completed to the Monongahela river, this company, in his judgment, had nothing to fear.

Mr. Swann said that he might be over-sanguine in his calculations; but the Board were as capable of judging as himself. His expectations might not be realized; but he had certainly good reasons for assuming all that he had stated in relation to the prospects of this great work.—*Patriot*,

The English Railway Journals, commencing with the new year, and which have recently reached us, are largely devoted to those reflections which the close of the year, and the state of affairs in Europe, are naturally fitted to inspire. It is on such occasions that men speak with an emphasis, to which, at other times, they are strangers; and the testimony they give, comes to us under more than ordinary sanctions; and we may take the reflections they suggest as the best index we can obtain to the state of feeling in the Old World; and we think that we cannot offer anything more acceptable to our readers than the experience which the past year has brought to our brethren across the water, who have been engaged in identical pursuits with ourselves, and who differ from us chiefly in the civil and political institutions by which they are surrounded. We quote, in the first place, from the London Railway Record of Jan. 6th:

The year just ended will be a memorable one in the annals of the world. In the early part of it a Parisian mob gave an impulse to mankind, which will be felt for ages to come. Forces long pent up in the depths of society, suddenly burst forth and overthrew all the barriers raised to keep them down. Nations relieved from the pressure of authority and law, reeled to and fro in wild commotion.—All that was good or great recoiled in horror from the fierce agitation, while the dregs of society rising to the surface, enacted for a

time the part of friends. New and applauding maxims of government were proclaimed. Under the name of "Liberty," the will of the most brutal of the populace was to be the sole law. Under the name of "Equality," rank, genius and worth were to be degraded and despoiled. Under the name of "Fraternity," the idle and the bad were to live on the industrious and the good. During some months of fearful suspense, it seemed a matter of doubt, even to the most powerful, whether the fairest province of Europe would not relapse into barbarism, under the hideous misrule of brigands and assassins.

Happily, ere the year has closed, these doubts and fears have given way to the hope of better things. Still, however, the times are critical. It will require all the prudence of the wisest and the best to "lay" the destroying spirit which has evoked, to collect the scattered elements of government, and frame such institutions as will, while guarding against the abuses of power, and the evils of anarchy, possess the all-important qualities of cohesion and stability.

So violent and widespread a convulsion could not occur without being felt over the whole world. This kingdom, though its institutions withstood the shock which laid surrounding thrones in ruins, did not pass thro' the ordeal unscathed. When so large a portion of mankind snapped asunder, the bonds which kept them within the limits of law, all the framework of society was rudely shaken. Those great and susceptible interests which it is the province of governments to cherish and protect languished. The confidence of man in man, ceased. Capitalists, the most timorous of their kind, naturally shrunk from placing their wealth within the reach of men who called property theft, and confiscation justice. The commerce of the Continent fell, as well it might, into a state of collapse. The extremities of the commercial system of Europe being thus paralyzed, England, the great centre in that system, could not fail to suffer in all those important interests which depend, for their prosperity, on the vitality of commerce.

As a necessary result of so much social disturbance and political ferment, public securities fell in price; and, among others, railway shares sunk to a ruinously low figure. The alarmed shareholders, horror-struck at the frightful depreciation of their property, were almost driven to frenzy by the acts of men, who, for objects best known to themselves, strove to create the belief that railways were, one and all, worked at a loss, and that, to conceal the terrible truth, the published accounts were mystified. In self defence, the ruling bodies of the various companies were led to submit to the public, clear and unmistakable expositions of their financial positions. Many painful confessions were thus wrung from the badgered Directors, by a process somewhat analogous to a prolonged tooth-drawing. But the very startling character of some of those confessions is, perhaps, the best proof that a "clean breast" was made. The statements published appear to have in reality been true and faith-

ful accounts of past expenditure, of availing assets, and of future liabilities, with some high-coloured estimates of prospective profits as a relief to the sombre array of figures.

Though some of these statements were of a kind to calm groundless fears, and to lay bare the arts by which those fears had been fomented, yet it is too true that most of them contained damning proofs of the cupidity of proprietors, of the unwise facility of Parliament, and of the reckless rivalry of Railway Boards. As they appeared one after another in grim procession, they supplied stern comments on the mad doings of the past. Capital wasted in unproductive lines; capital wasted in getting Acts for lines never to be made; the profits of paying lines frittered away in guarantees to companies whose unaided resources would not suffice for their working expenses—such were the discouraging revelations which had to be made; and so are the gorgeous dreams of 1845 to be realised, as if in mockery of human hopes and human foresight. But bad as these things are, the most unsatisfactory portions of the statements were those which disclosed the large amount of uncovered mortgage debts with which most of the companies are encumbered. Already has pressure been applied to force the creation of preference shares to the further detriment of the luckless holders of existing stock; and it is not easy to see how this pressure is to be resisted while confidence in Railway Securities continues at its present lowest ebb.

There are other events in the history of railways during the past year which, if our limits permitted, are worthy of note. In the course of it much inspired to discourage those concerned in railway, but little to make them despond. It was emphatically a year of trial. The stability of all national and private interests were tested to the utmost; and it augurs favorably of the future prosperity of railways, that they have well maintained their ground. They are, indeed, a new and powerful instrument in the hands of the British people, whose energy, industry, probity, and intelligence, have made this country the marvel of the universe. Who can doubt that this great country, ever remarkable for the elastic vigour with which it recovers from almost overwhelming reverses, will, with so potent an auxiliary as railways, start on a new career of peaceful triumphs, and surpass even its past achievements, mighty as they are, and unequalled in the annals of the human race?—*Railway Record.*

Such is the sombre picture presented to us of the fears, sufferings, anxieties, and discontents which have exercised our English brethren the past year. It is a true one, and what we might naturally expect. For the privileged classes there, change is another word for the loss of everything that makes life valuable. This class require vastly more to supply their wants than the labor of their own hands could produce were they the most skilled in the work of production; but feeling their ignorance of manual labor, they can see nothing in the change that would compel them to supply their wants by their own labor, but starvation and all its horrors.

Yet (barring the local matter of slavery) in this country that state of things exist which they so much deprecate, Liberty, Equality, and Fraternity, with such distinctions & differences as are naturally found in mankind; and while Europe has been convulsed with "fears of change perplexing monarchs," and those nations which have not been torn in sunder by domestic convulsions, feel that they are resting on a sleeping volcano, which they know not how soon may overwhelm them, the past year has done more than any one, since the formation of our government, to promote kind feeling and confidence between all classes—to attach our people to the government—to give stability to our institutions, and an increased confidence in that very kind of property that has suffered much in England; and though this country, in common with many in Europe, has changed its rulers, perfect order and contentment has reigned; for all classes, the rich and the poor, feel that they should be equally sufferers by a change of government; and were all trace of our government abolished, and nothing left but the recollection of it, and we were called upon to frame a new one, the universal voice would call back, in all its main features, the government of the past. England has, and continues to teach us many useful lessons; but has not Brother Jonathan some useful lessons for her, and will Charierism ever be put down, and order and quiet exert their natural dominion over her people until some of those lessons are put in practice.

The following is from the Railway Chronicle of same date.

The silent march of Time has now placed us within the treshold of a new year; and 1848, with all its disasters and changes, has passed away. Never surely did a few short months present such a series of events! The commercial pressure of the latter part of 1847 appeared to be diminishing, and men reasonably expected that matters were to resume their ordinary course, when the astounding intelligence reached England that the sagacious and powerful king of the French had abdicated his throne, and was a fugitive before his enemies. There is no romance like that of real life, and none of the ex-king's escapes in his long and adventurous career were more remarkable than this last, in which, with his queen, he reached in safety the shores of England, almost penniless, and destitute of even a change of raiment.

It would take up more time than our space will afford to trace even an outline of the various convulsions which followed that in France; the recollection of them are too recent to require more particular allusion, but we cannot forbear congratulating our readers on the manner in which the ensane endeavours of some mischievous and misguided men were met by the majority of their resolute and well-disposed countrymen. The chartists in England and the rebels in Ireland were effectually put down, and, happily, almost without bloodshed! Such events, however, could not but act injuriously on commerce; and we have probably gone through as severe a crisis as ever occurred in Great Britain;—nevertheless we have great reason to be thankful that we have not suffered to anything like the extent that our neighbours across the Channel have done, where credit has been annihilated, and trade all but destroyed.—

Germany and the rest of Europe, excepting Russia, have been convulsed politically and commercially nearly as much. The interest to which we more particularly devote our columns has been very freely blamed as the great and crying evil which occasioned the commercial crisis; but from this we differ. No doubt too large an amount of capital was devoted to the construction of railways—too many were commenced at the same moment, and speculators who undertook to provide thousands, where they should only have promised hundreds, have ruined themselves in the crash their rashness produced, and brought the value of railway property to the lowest ebb. The tide, however, which receded so rapidly, appears now to be steadily on the turn, and unless politics interfere to check its onward progress, we look forward with hope and confidence for the future. We are far from wishing to buoy up vain expectations; but if railways are prudently conducted—and surely directors have had such a lesson lately as ought not to be forgotten—they will yet pay a remunerative interest, and, in spite of the burdens which have been imposed upon them, benefit the shareholders, who though it has been the fashion to abuse them, are still entitled to some consideration.

Let us now look a little to the advantages they have spread through the length and breadth of the land. To those who travel, either on business or pleasure, their value in money, time and safety, is beyond calculation; and whether it is the sovereign or the subject, all in their respective positions are reaping the fruits of the spread of railways. To the consumers and merchants, the facility and cheapness of communication afforded by the iron roads is enormous. Manufactured goods are delivered at every considerable town in England or Scotland, a few hours after the order is received in Manchester, Birmingham or Glasgow; coals are brought to the door of the hall or cottage, and delivered in many places at one-half their former cost, in all at very reduced rates, and an important addition to health and comfort brought within reach of the poorest. These are only a few of the advantages which railroads have introduced amongst us, and yet the capital laid out on their formation has been denounced by some writers as valueless; their construction has been compared to that of the Pyramids, or Versailles; and the national loss assumed to be equally great.—Such exaggerated statements would hardly deserve notice if they had not been made from quarters which command attention. We think, however, that better days are coming, and heartily trust that this time next year may prove the correctness of our views.—When we look at the enormous aggregate which has been received every week during the past year, even in our worst periods of cruel and trying adversity, we see sound grounds for assuming that more prosperous times must bring them a corresponding increase to the internal traffic of the country, which must, of course, react to the material advancement of railway property.

The following is from the London Mining Journal and Railway Gazette:—

It was with great unwillingness that we allowed the first Saturday of 1849 to pass by, without congratulating our numerous readers on the advent of the new year. The seasons have returned to us with their wonted regularity, and, as they rolled along, presented the gifts with which nature filled her lap, for the revival and refreshment of our ever independent race. The great clock of the heavens worked on; its wheels want no oiling; its springs require no additional elasticity; and the vast movement will be perpetuated, until the mighty hand that put up and impelled the magnificent machinery shall be put forth to arrest and take it down. We have not been so steady in the little Circle of Christendom; old Governments have fallen, and others, of an untimely birth, have sprung up to supersede them. The framework of European society has been, throughout the year, in a state of painful dislocation, and the changes we have experienced were but the forerunners, it was feared, of greater ones to follow. This was too much the character of the entire year, and how injurious, how ruinous to commerce, and the confident intercommunication of nations, these recollections of the past, and forebodings of the future, must needs be, we need not now delineate.

Notwithstanding this series of storms, the commercial success of the year is highly satisfactory, and under the circumstances, to our minds, surprising. The tempest, terrible as it was, was not strong enough to take the buoyancy out of the commercial principles upon which we had embarked; and certain it is, that had our course been fettered by the old restrictions, or superintended by the old helmsmen, our commercial voyage last year would have been more nearly bounded by the Isle of Dogs, than enlarged to the circumnavigation of the globe. The particular department of industry to the progress and elucidation of which our Journal is devoted, has endured some of the drawbacks and hindrances which have beset almost all the springs of our productive wealth. In mining operations there has not been that activity, nor have they produced that remuneration which the skill, diligence, and capital dedicated to them, had induced the public to hope and to expect. We have been sharers in the general interruption which business has sustained; but we are again feeling a breeze, and filling out our sails. An active prosecution of this branch of industry is reviving, better prices for mining produce is ruling in the market, and we fully expect to see a better scale of profits to adventurers, and of wages to operative miners prevailing, than has recently been the portion of either.—With the Consolidated Three per Cents. up to 89, money must be in great abundance, and waiting but the smallest conceivable impulse to secure its investment. We begin, therefore, 1849, with a large capital in hand, and anticipate the happiest results from its seasonable and judicious mining application; and it is on these prospects, as well as on the

results actually realized in the year just expired, that we wish to congratulate our mining friends, both far and near.

St. Lawrence and Atlantic Railroad.

The St. Lawrence and Atlantic Railroad Company, a few days ago, issued cards of invitation to His Excellency, Lord Elgin, and the members of the Legislature, to ride over the portion of their road now finished to St. Hyacinth, on Saturday last, the 10th instant; an invitation which, by the politeness of the Chairman and Directors, was extended to the gentlemen of the fourth estate.

Accordingly at half-past ten on Saturday morning, there was a large assemblage of members of the Legislative Council, and of the Assembly, at the station house, at Longueuil. His Excellency soon after arrived, accompanied by Lady Alice Lambton, and Lady Emma Brue, looking, we are glad to say, in excellent health, nor suffering apparently in the least from the intense cold of the morning.

His Excellency and the ladies, were received by the Hon. Mr. Morin, Chairman of the Company, and by the Directors, in the most respectful manner, and conducted to a waiting room fitted up for them, until the cars were ready to start.

The distance to St. Hyacinth was effected in an hour and a half.

Immediately after arrival at St. Hyacinthe, the company visited the College, and were introduced to the Reverend Superior, after which they assembled in the large hall below, where an address was delivered to His Excellency by one of the students, congratulating His Lordship, and the Railroad Company on the completion of the road to the village of St. Hyacinth, to which His Excellency made an appropriate reply in French.

At half-past one the company adjourned to the station-house, where the Railway Directors had directed to be spread an excellent collation, to which an abundance of Champagne and other wines enabled all to do most excellent justice.

The health of his Excellency Lord Elgin was proposed by the Hon. Mr. Morin, and was rapturously drunk.

His Excellency, in returning thanks, gave great praise to the Directors of the Railroad for the perseverance they had shown—a perseverance amounting to patriotism—in carrying on their works, at a time when the whole money market of the world was depressed, and when the fall of British Consols—unprecedented for the last sixty years—had deranged financial arrangements in England; and he hoped that the public spirit of the Directors—showing, that in the midst of difficulty, they had not despaired of their country—would entitle them to the confidence of the public as well as of all who heard him. His Excellency was frequently interrupted by cheers, and concluded by proposing success to the St. Lawrence and Atlantic Railway Company.

The health of the Queen was proposed by the hon. Chairman, who prefaced his re-

marks with an exceedingly appropriate allusion to the day being the anniversary of her Majesty's marriage day, and was drunk with an enthusiasm unbounded. The prosperity of the village of St. Hyacinth was also drunk, and was replied to by P. E. Leclerc, Esq., in a very neat address.

The company again embarked about three o'clock, and reached Longueuil about half-past four.

The day although cold was pleasant, and the cars, having stoves fixed in them, were exceedingly comfortable.—*Montreal Gazette.*

Railroad to the Pacific.

We this week lay before our readers the Memorial of Mr. Bayard, praying the aid of Congress in constructing a Railway from the Mississippi to the Pacific. Without discussing at this time the superior merits of any of the routes, we think we hazard nothing in saying, it has become the settled conviction of our people, that we must open a railway communication with our possessions on the Pacific, and that the question which chiefly concerns Congress is, which is the most feasible route, and not the amount of aid to be granted. It should either build the road, or aid in construction by individuals, by reasonable grants of land. Our public domain is valuable, not so much for the revenue we may derive from its sale, as a means of extending our free institutions, and of enlarging our population, which in a pecuniary point of view, is much more for the interest of the old States, than to receive their proportion of the sale of the lands. The events of the two past years have passed by us in such rapid succession, and were of such vast magnitude, as to astonish and bewilder us, and now that we are removed from their immediate influence, it becomes us to take measures at once to adapt ourselves to our new situation, and meet the responsibilities which it imposes. We hope our readers will give the memorial careful attention, as it is the most satisfactory statement we have yet met with, of the advantages of such a road, and the necessity that exists for its construction.

MEMORIAL.

To the Senate and House of Representatives of the United States of America in Congress assembled:

The memorial of William Bayard & Co., respectfully represents that they have for many years contemplated the completion of a railroad through the United States to connect with the Atlantic and Pacific oceans—that William Bayard, acting in concert with others in the United States, visited Europe several years since for the purpose of making arrangements for funds for the completion of said road—that the general monetary depression, and especially the shock which American credit experienced about that time, caused him to defer any action in the matter until recently. In the meantime, your memorialists have sought every means of satisfying their judgments, not only as to the feasibility of the project, but to seek out the best track under all circumstances for the continuation of said road west of the Mississippi river.—The late treaty with Mexico has furnished that route, and they now propose to contract for its construction upon the following terms, to wit:

The main track of said railroad to be made

from St. Louis, Missouri, to intersect the Rio Grande in the neighborhood of the head waters of the Red and Gila rivers, thence to some port or ports in California; *Provided*, That hereafter any chartered company or companies, shall have the right of connecting with the same, by running railroads from Cairo in Illinois, Memphis in Tennessee, Vicksburg or Natchez in Mississippi, or from any other point or points south of said main trunk. This road is to be surveyed and located by engineers appointed by the United States, with the concurrence of the engineer of the contractors. All travellers and officers of our army, who have ever been this route, agree to its practicability, as doubtless would have done our indefatigable and talented pioneer, Col. Fremont, had he have travelled over the same. The United States to grant the right of way, and to set apart the lands along the said road 25 miles on each side, in aid of the construction of the same. The contractors to have permission to dispose of said lands ratably as the road progresses; and for the purpose of ascertaining the progress of the work, and of designating what lands may thus become subject to the disposal of the contractors, the United States shall appoint one or more persons on whose certificates duly communicated to the proper department of government, permission shall be granted to the contractors to dispose of said lands: *Provided*, that the same shall be sold to actual settlers only, at not less than the government price of public lands, and not more than six hundred and forty acres to any one person. The United States shall appoint suitable persons to ascertain whether any, and if any, what amount of lands within twenty five miles of said road belong to individuals, and such quantity shall be granted to said contractors to be selected elsewhere on any of the public lands of the United States subject to sale.

Within thirty days after the completion of said survey, as a guarantee for the construction of said roads, your memorialists and his associates obligate themselves to place in the treasury of the United States a sum not less than five millions of dollars in government securities, according to their marketable value at the time of deposit, to be ascertained by the secretary of the treasury. The said deposit shall bear an interest at the rate of six per cent. per annum, which interest shall be paid over to said contractors semi annually; and said deposit shall remain in pledge for the faithful performance of said contract until three fourths of said road shall have been completed, and then refunded to said contractors.

Your memorialists obligate themselves to construct said road of iron rails of the most approved form, which shall weigh not less than sixty pounds per yard; and to complete the same within eight years from the commencement of said surveys; and to carry the United States mails from the Mississippi river to the port or ports selected in California in not exceeding four days; and for the carrying such mails, Congress may fix such compensation as they may deem just and equitable.

In view of the extraordinary magnitude of this work, its immense cost, the influence which it must necessarily exert upon the prosperity of our country and the commerce of the world, the large bounty asked of the government in aid of its construction, and the *quid pro quo* for the granting of such bounty, all justify, in the opinion of your memorialists, more detailed reasons than appear at first blush upon their simple proposition of contract. They therefore beg leave to enumerate some of those reasons.

From the centre of Maine there are continuous railroads, which, with three small links yet to complete, tap the lower Mississippi both at Vicksburg and Memphis and Cairo, a distance of 2,200 miles; and with small connections to be made, tap the upper part of that river at St. Louis, Alton, Quincy and Galena. From Cairo, at the mouth of the Ohio river, there is a railroad projected from St. Louis, and the interior of Illinois, which, when the upper river is obstructed by ice, will at all seasons afford a communication with the low country. The whole line of the lakes from Champlain to Michigan have been tapped at different points by roads running east, south and west. To the east they connect with roads whose great terminus is the commercial emporium of New-England, and from thence they radiate to every point of the compass, reaching into almost every workshop of that industrial people. To the south they reach into the great cities of New York, Philadelphia, Baltimore, Cincinnati, and still further south. To the west, they reach the Mississippi at St. Louis, Alton, Quincy and Galena. They have in fact reached the verge of our Mississippi settlements. Where we have people there have they built roads. Shall they stop at the Mississippi?

The events of the last few years, consummated by the late English and Mexican treaties, answer this inquiry in the negative. Those treaties have given us fifteen hundred miles of the Pacific coast. With a vast area of back land capable of supporting many millions of people, with the best ports on that sea, laying abreast of, and within 22 days' steaming of the rich commerce of China and Japan, that our people will cross to the Pacific coast and settle that country rapidly, no one doubts. That they must have our government and protection, and that they must not be alienated from their fatherland by absence and distance all agree. Then to bring them back and unite them in bonds indissoluble is the question. How is that to be done? The answer is plain.

After stating its objections to the route proposed by Mr. Whitney, as lying so far north as to be impassable for a great extent of its line, in the winter, on account of snows, as running twelve hundred miles through a country destitute of wood and water, and as having no good harbor at its western terminus; and to the Isthmus route, as being in the possession and under the control of a foreign power, as liable to be interrupted at all times in case of war, as increasing the distance 5,000 miles, as vastly increasing the expense of transportation, and as being a dangerous route for vessels, it goes on to urge rea-

sons for government aid in construction of the road proposed.

1st. Their pledge of five millions of dollars or more, is a sure guarantee that it will be completed.

2d. That when completed, it is through the heart and centre of our country and people. It takes its course west from the Mississippi, which is in the heart of nearly the whole of the steam and flatboat navigation of that great valley. At this starting point it unites with railroads which already have bound together nearly the entire commercial inteeast of our country in one whole. The continuation of this road west will do more to soften the asperity of sectional politics, and to make an unity of interest, commercial and political, than any system within human reach. It is a work, of all others yet devised, the least sectional, the most national. It has its eastern termini alike in every Atlantic city from Savannah, in Georgia, to Bangor, in Maine. It will have its feeders upon the Gulf of Mexico, from the mouth of the Rio Grande to Pensacola. The frozen waters of Boston will travel to the gold placers of California, in the same trains with the British and American mails. These trains will return with the luxuries of the eastern world, and the produce of our own mines. Every section of our country will send forth the enterprising to people, and develop a wealth which must necessarily give us a balance of trade against all the world, and consequently a prosperity over all the world. The iron masters of Missouri, Pennsylvania, Tennessee and Georgia will come into a healthful competition for the sale of their metal, which gold diggers will not work. The completion of this road with a single track, at sixty pounds per yard, and at the present prices of iron, will require an outlay for this article of fourteen millions of dollars. At seventy-five pounds per yard, it will cost sixteen millions eight hundred thousand dollars, and at one hundred pounds per yard will cost twenty one millions of dollars. When the wants of commerce and public convenience shall require a double track, the double of these sums in iron must be expended. In addition to which the estimated outlay of thirty millions of dollars must be expended by your memorialists for grading, bridge building, engines, cars, depots, etc., before the completion of said road. This large outlay of capital, held forth to the industry and enterprise of our country, must benefit every branch of business.

In a foreign commercial point of view, the continuation of our railroads from the Mississippi to the Pacific, is of transcendent importance to this country. A line drawn from the greatest commercial emporium of Europe to Canton in China, would follow nearly the whole line of our roads from Boston to San Diego, in California. Thus the London mails could reach Boston in eleven, the Pacific in twenty, and Canton in forty two days by steam and the proposed road. All the European correspondence would necessarily take this route, and thereby add immensely to our postal receipts, while at least the lighter articles of eastern luxuries would cease to

make the tedious circuit of Cape Horn. Our depots upon each sea, would be the general rendezvous of European shipping, and at no distant day our country would become, in the language of the present indefatigable and sagacious Secretary of the Treasury, "the great centre of trade and business."

AMERICAN RAILROAD JOURNAL.

Saturday, February 24, 1849.

Locomotive Engines.

According to our recollection, the first locomotive in this country was an experimental engine of moderate size, built by Peter Cooper, Esq., of this city, in 1830. The first one introduced into New England was built by George Stephenson, at Newcastle-upon-Tyne, and imported by the Boston and Worcester railroad for the purpose of running their first trains to Newton in the year 1834. At Boston this specimen of the greatest of mechanical contrivances excited immense curiosity on its arrival, among all classes of men interested in the progress of the mechanic arts in the country. An English engine driver took charge of the iron horse, and displayed its working capacity with the most lively satisfaction, to a wondering and admiring crowd.

To this day, the most lively curiosity is excited whenever a new locomotive is first moved upon the track. No anxious mother is more eager to catch the first glimpse of her offspring, than a locomotive engine builder is to witness the first movement of his first locomotive. It is a moment of throbbing impatience and of anxious hopes.

As soon as this new engine was tried, the inquiry was raised among the sagacious men of Massachusetts, whether they could be produced at home.

The machine shop of the Locks and Canals at Lowell, at once embarked in the work of construction, and for a time supplied many engines for the New England roads, copying very nearly the model of Stephenson. These engines have been found to be of the most admirable workmanship, and though lighter than those in use at the present day for passenger travel, they are still doing good service on many of the branch lines, or used in the construction of new roads for drawing gravel and timber trains.

At an early day M. W. Baldwin started his shop at Philadelphia. Descriptions of his first locomotives are found in the Journal, in some of its earliest volumes.

The next attempt at building locomotives in the United States, was made by Messrs. Long & Norris in Philadelphia, and the business has been steadily continued from that time to this, though for many years past under the name of Norris, Brothers, whose reputation is so well established. The Messrs. Norris have introduced some of the most valuable improvements in locomotive engines, and were among the first to construct an engine capable of successfully ascending heavy grades, a result which has materially changed the character of railroad construction within the last few years.

The Norris engines are remarkable for strength of frame, and excellence of finish. As models of symmetry and graceful proportion, we think it difficult to surpass them.

Since the establishment of Norris works, M. W. Baldwin's locomotive shop in Philadelphia, and Ross Winans in Baltimore have grown to be great establishments. After that, Hinckley of Boston set up his locomotive shop, since grown to be the Boston Locomotive Works.

The splendid establishment of Rogers, Keitchum & Grosvenor, of Patterson, N. J., was, we believe, the next one started in point of time. They are introducing upon the New York and Erie, and other railroads in the country, a class of engines which are giving them the highest reputation as builders.

Within a few years past, a shop has been started at Taunton, Mass., another at Ballardvale, another at Portland, and another at Springfield, and a second shop at Patterson, and at Baltimore; and locomotive engines have also been built at Reading, Pa., and Manchester, N. H.

The Newcastle Manufacturing Company, in Delaware, has a fine shop in successful business, and now take orders for locomotives.

The Mattewan Co. at Fishkill Landing, are also engaged in building locomotives. They have recently embarked in the business under the most favorable auspices, in connection with the Hudson River railroad.

A new shop at Schenectady, under the charge of E. S. Norris, is just starting with new and improved machinery, and full assurances of business.

At Cambridge Port, Mass., Messrs. Davenport & Bridges have accumulated a fortune in the manufacture of railway cars. They have recently associated with them Mr. Lewis Kirk, of Reading, Pa., whose reputation is a complete guarantee of success, and established, in addition to their car shop, an extensive shop for the manufacture of locomotives and all other machinery.

We have here a list of sixteen different establishments already, engaged in this branch of manufacture. We now send engines to Canada, to Cuba and to Europe, and import none. No class of men have done more to raise the standard of American labor, and promote the highest interests of society, than the men who have started these enterprises in our midst. An extensive market is now open before them from the great number of new roads rapidly approaching completion, or in progress.

It is now hardly necessary to say to the directors of new roads, that orders for locomotives should be given as soon as the work of grading is fairly commenced. Many a road has suffered for want of a sufficient equipment at the start.

A subject so fertile in suggestions will require further notice at an early day.

Richmond and Danville Road.

We are gratified to learn that this work is now in rapid progress of construction, the contractors for the first section having upwards of 700 hands actively engaged on it, most of whom are now at work near the Coal Pits, in Chesterfield. We understand that a proposition has been made by the directors to let the remaining portion of the road from Staunton to this place, on terms which, it is presumed, will be promptly accepted by the contractors, but which are rather more favorable to the company than those of the present contract.

We learn further that at the last meeting of the directory, it was determined to build an iron bridge across the river at Richmond, the contract for which will probably be concluded with Mr. Ellet, the famous architect, who constructed the wire suspension bridge at Niagara Falls. It is said the cost will not exceed \$80,000; so that an iron bridge, bearing the impress of artistic skill, and presenting all the elegance of practised taste, may now be constructed for one half the amount that it formerly took to build a wooden one: for the bridge across James river belonging to the Petersburg company cost, we believe, about \$150,000. A wonderful reduction, truly!

The friends of the improvement in the up-country

will be gratified to learn these facts, and will hail them at once as flattering prospects for the company, and as an earnest of the directors to push the work to a speedy and profitable completion.

We have just received the circular of the Trustees of the Illinois and Michigan Canal, who were appointed, under the loan act of \$1,600,000, for the completion of this work. Our readers are aware that after there had been about \$5,000,000 expended on this Canal, by the State of Illinois, the work was abandoned for some years, for want of means to carry it on. Subsequently the State induced certain of its bondholders to advance an amount sufficient for its completion, and as security for the payment of this loan, the State placed in the hands of three trustees—two appointed by the bondholders, and one by the State—the Canal and all its works, together with 225,000 acres of land lying on the line of the canal, and 6,000 lots lying in the towns of Chicago, Lockport, Ottawa, La Salle, &c. It also guaranteed to the subscribers of this loan a priority of payment of their bonds to a certain extent after the \$1,600,000 was fully reimbursed. The Trustees appointed under this arrangement, organised in 1815, pushed the work vigorously to its completion, and on the 24th of April, 1848, it was opened for business.

Main Canal from Bridgeport (four miles from the fork of Chicago river) to the western termination of La Salle, is 96 miles in length, including the river portion, about 100 miles. It is 60 feet wide at the surface, 30 feet at the bottom, and 6 feet deep.

The following are some of the principal works connected with the Canal:

Des Plaines Feeder to the summit level, by a side cut of 200 feet in length.

Calumet Feeder from the Calumet river to the summit level is 17 miles long, 40 feet wide at surface and 4 feet deep.

Du Page Feeder on the Joliet level, by a side cut of one quarter of a mile.

Kankakee Feeder on the Dresden level is 4 miles long, 40 feet wide at surface, and 4 feet deep. It is conducted across the Illinois river by an aqueduct.

Fox river Feeder (lower) is $4\frac{1}{2}$ miles in length, and is brought in upon the Ottawa level. It is 40 feet wide and 4 feet deep.

Two Pumping Engines driven by steam, for raising water 8 feet high, from the lake to the summit level, for a maximum trade upon the Canal in case of drought in the Calumet and Des Plaines rivers—each engine being capable of raising 6,000 cubic feet per minute.

There are seventeen Locks on the main line, built of the best description of hammered masonry. They are 110 feet long by 18 in width, calculated for boats carrying from 100 to 150 tons. The lift of these locks average 9 feet, the least lift being $3\frac{1}{4}$ feet, the greatest $12\frac{1}{4}$ feet, and the whole lockage 158 feet.

There are Lock-houses for the lock-keepers.

Basins for the accommodation of trade, made generally by enlarging or widening the Canal.—These have been constructed at Lockport, Joliet, Du Page, Ottawa, and La Salle, and are $\frac{1}{4}$ mile in length, and 120 feet in width, to $1\frac{1}{4}$ miles in length, and 200 feet in width.

At La Salle there is a steamboat basin covering an area of $6\frac{1}{2}$ acres, communicating with the Illinois river by a steamboat channel 118 feet wide, and nearly a mile in length.

The whole amount received by the Trustees under the loan is as follows:—

| | |
|---------------------------|----------------|
| Loan exchange & interest. | \$1,611,969 02 |
| Tolls in 1848..... | 87,873 91 |
| Sale of lands..... | 236,130 42 |
| Incidentals..... | 13,058 74 |

\$1,949,042 09

The total amount of expenditures by the Trustees is as follows:

| | |
|--|--------------|
| Expenses negotiating loan, | 27,069 18 |
| Construction of canal and feeder..... | 1,249,111 19 |
| Hydraulic works, pumping engines & building. | 55,772 92 |
| Contingent to general expenses..... | 151,981 53 |
| Management of lands... | 22,069 55 |
| Maintenance and repairs of canals..... | 44,689 47 |
| Interest on loan to Nov. 30, 1848..... | 169,165 48 |

\$1,719,859 32

Leaving balance expended..... 229,182 77

This sum is chargeable with—

| | |
|---|-------------|
| Unclaimed interest and principal due Oct. 20, 1848..... | \$30,000 00 |
| 6 months' interest on loan due Nov. 20, 1849..... | 43,300 00 |
| Construction of Calumet feeder..... | 25,000 00 |
| Repairs on canal previous opening in 1849..... | 20,000 00 |
| Incidental expenses..... | 10,000 00 |

\$128,300 00

Leaving as sinking fund on the loan.. \$100,882 77

| | |
|---------------------------------------|-----------|
| Amount of receipts on canal 1848..... | 87,890 87 |
| Cost of maintenance, '48, | 37,944 59 |

\$49,946 28

The revenue for the year 1849, are estimated as follows:

| | |
|--|--------------|
| Balance in the treasury.. | \$100,882 77 |
| Notes receivable in 1849 for land..... | 212,000 00 |
| Canal revenue, 1849.... | 120,000 00 |
| Interest, rents & proceeds of lands sold, but not settled for..... | 37,500 00 |

\$470,382 77

Expenditures in 1849—

| | |
|-----------------------------------|-------------|
| Maintenance of canal... | \$40,000 00 |
| General expenses..... | 20,000 00 |
| Land sales and contingencies..... | 10,000 00 |

\$70,000 00

Leaving a balance towards paying the loan, 1849, of..... \$400,382 77

| | |
|--|----------------|
| Estimated value of lands unsold..... | \$1,398,380 05 |
| Balance due on lands sold, not including interest..... | 363,981 00 |

\$1,762,367 05

Showing assets, in addition to the future earnings of the canal, for the payment of its debts, of..... \$2,162,747 82

This Canal is a work of national concern. It probably occupies the best route for water communication between the Mississippi and the Great Lakes. It is constructed on a scale of such magnitude that it will admit of any amount of business, and its completion will give a great impulse to the internal commerce of the country. It gives symmetry to our whole system of internal improvement; and when we consider that Illinois is destined to become the great Western State of the Union, we cannot doubt but that the revenue of this Canal will eventually defray the whole expense of its construction.

Southwestern Railroad Company.

We have just received the first annual report of this company, which is now engaged in the construction of a railroad from Macon, Ga., to Fort Gaines, on the Chattahoochee river. Our readers will recollect that about a year since we published the report of a preliminary survey of the route, accompanied by a map of the country through which the proposed road passes. This company was organized on the 10th of February last, and immediately commenced the work of construction. From the engineer's report it appears that 93 miles are located, being the section between Macon and Richland, Stewart county, and ready for contract, and that on 35 miles the most difficult part of the whole route, the work of grading is rapidly progressing. The route is very favorable for railway construction, the maximum grade being but 45 feet in the mile, and the shortest curves having 2500 feet radius. The whole amount expended on the road thus far is \$63,315 98. The whole amount of subscriptions raised is \$512,220 00. In addition to this, the city of Savannah has guaranteed the sum of \$250,000, payable as soon as the completion of the road is placed beyond contingency. This road appears to be in the hands of right kind of men, and from the energy and perseverance that Georgia has shown in the construction of her works, we have no doubt but we shall soon have the pleasure of chronicling its completion. It will form another important link in the great chain of road which is ultimately to connect New Orleans and the northern Atlantic cities.

Mansfield & Sandusky Railroad,

We have just read the report of this Company, from which it appears that the whole amount expended on account of the road is \$1,106,121 25.—The gross amount of receipts the past year was..... \$85,276 34 Expenses for same period..... 27,355 30

Leaving as net earnings..... \$57,921 04

The receipts of the past year do not vary much from those of the year previous. There has been an increase from passengers, though the Mad River road drew from it much of the travel that formerly took this route from the Lake to the interior of the State. The diminution in receipts arises almost wholly from the falling off in wheat and flour, which amounted to 120,427 bushels of wheat, and about to 43,407 barrels of flour. A road is now in progress from Mansfield to Newark, a distance of 60 miles, (via Lexington, Belleville, Independence, Ankney-Frederickstown, Mount Vernon, Utica, and St. Louisville), is graded and bridged, and will probably be opened the present year. This road, when completed, must exert an important influence over the Mansfield road, and vastly increase its business. It is proposed to extend this road from Newark, via Lancaster, Circleville and Chillicothe, down the Scioto Valley, by Piketown, to Portsmouth, thus forming another line of railway from the Lakes to the Ohio.

The following are some of the principal articles of merchandize carried on the road the past year:

| | |
|---------------------------|------------------|
| Wheat..... | 383,654 bushels. |
| Corn, oats, and barley... | 29,642 " |
| Flour..... | 19,191 barrels. |
| Salt..... | 15,077 " |
| Seeds..... | 887,382 pounds. |
| Butter and lard..... | 767,102 " |
| Wood..... | 332,955 " |
| Ashes..... | 316,380 " |
| Tobacco..... | 110,752 " |
| Dried fruit..... | 211,956 " |
| Bacon and pork.... | 114,500 " |
| Lumber..... | 375,480 feet. |
| No. of passengers..... | 26,313 |
| Received from do., | \$24,155. |

OCEAN STEAM NAVIGATION.

In our paper of the 3d instant, we gave some account of our Merchant Steamers designed for Ocean Navigation. The list embraced no less than twenty in actual service or nearly fitted for sea, besides the new boats already partially contracted for, or projected, amounting to several in addition. Every day brings to us some new fact, disclosing the rapid development of the spirit of enterprise so strongly aroused of late in this new direction.

Already the travelling and fashionable world are anticipating a new avenue for enjoyment, in the shape of a voyage to Europe. Instead of Saratoga and Newport, the White Mountains and Niagara Falls, the fashionable resort for summer amusement will soon be the Alps, the Highlands of Scotland, Paris and the Rhine.

Ten days' sail from New York to Liverpool will soon be sufficient time to accomplish the voyage in the spacious and elegant packets now in progress; and six weeks will suffice for a tolerable acquaintance with European life, under the improved facilities for travel soon at command.

The rush of travel each way will soon reduce the expense of an ocean tour, to one half its present cost, and the people of the two hemispheres will find in this interchange new sources of pleasure and enjoyment. The exchange of ideas and of civilities will have a most favorable effect, not only upon the political and social condition of this world, but upon all the relations of trade and business. Five years will make changes in our midst little dreamed of by those unobservant of the progress of the mechanic arts, as applied to locomotion in the form of the railway and ocean steamers.

IRON BRIDGES, BRIDGE & ROOF BOLTS, etc.—STARKS & PRUYN, of Albany, N.Y., having at great expense established a Manufactory with every facility of Machinery, for manufacturing Iron Bridges, Bridge and Roof Bolts, together with all kinds of the larger sizes of Screw Bolts, Iron Railings, Steam Boilers, and every description of wrought iron work, are prepared to furnish to order, on the shortest notice, any of the above branches, of the very best of American Refined Iron, and at the lowest rates.

During the past year S. & P. have furnished several Iron Bridges for the Erie Canal, Albany Basin, etc., and a large amount of Railroad Bridge Bolts, all of which have given the most perfect satisfaction.

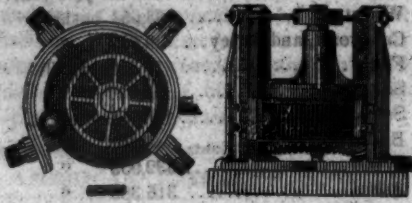
They are permitted to refer to the following gentlemen:

| | |
|-------------------------|-----------------------------|
| Charles Cook, | Capal Commissioners |
| Nelson J. Beach, | of the |
| Jacob Hinds, | State of New York. |
| Willard Smith Esq., | Engineer of the Bridges for |
| Messrs. Stone & Harris, | the Albany Basin. |
| Mr. Wm. Howe, | Railroad Bridge Builders, |
| Mr. S. Whipple, | Springfield, Mass. |
| | Engineer & Bridge Builder, |
| | Utica, N. Y. |

January 1, 1849.

1y*

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE Subscriber, having recently purchased the Right of this Machine for the United States, now offers to make transfers of the right to run said machine, or sell to those who may be desirous to purchase the right for one or more of the States.

This machine is now in successful operation in ten or twelve iron works in and about the vicinity of Pittsburgh, also at Phoenixville and Reading, Pa., Covington Iron Works, Md., Troy Rolling Mills, and Troy Iron and Nail Factory, Troy, N.Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are numerous—considerable saving in first cost; saving in power; the entire saving of shinglers, or hammersman's wages, as no attendance whatever is necessary, it being entirely self-acting; saving in time from the quantity of work done, as one machine is capable of working the iron from sixty puddling furnaces; saving of waste, as nothing but the scoria is thrown off, and that most effectually; saving of staffs, as none are used or required. The time required to furnish a bloom being only about six seconds, the scoria has no time to set, consequently is got rid of much easier than when allowed to congeal as under the hammer. The iron being discharged from the machine so hot, rolls better and is much easier on the rollers and machinery. The bars roll rounder and are much better finished. The subscriber feels confident that persons who will examine for themselves the machine in operation, will find it possesses more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y. P. A. BURDEN.

PATENT MACHINE MADE HORSE-SHOES.

The Troy Iron and Nail Factory have always on hand a general assortment of Horse Shoes, made from Refined American Iron. Four sizes being made, it will be well for those ordering, to remember that the size of the shoe increases as the numbers—No. 1 being the smallest.

P. A. BURDEN, Agent,
Troy Iron and Nail Factory, Troy, N. Y.

RAILROAD SPIKES & WROUGHT IRON FASTENINGS.

THE Troy Iron and Nail Factory, exclusive owner of all Henry Burden's Patented Machinery for making Spikes, have facilities for manufacturing large quantities upon short notice, and of a quality unsurpassed.

Wrought Iron Chairs, Clamps, Keys and Bolts for Railroad fastenings, also made to order. A full assortment of Ship and Boat Spikes always on hand.

All orders addressed to the Agent at the Factory, will receive immediate attention.

P. A. BURDEN, Agent,
Troy Iron and Nail Factory, Troy, N. Y.

RAILROAD IRON.

1000 tons T Rails, weighing about 60lbs. to the yard, of the latest and most approved pattern, for sale by BOORMAN, JOHNSTON, & CO.,

119 Greenwich st., New York.
Jan. 20, 1849. 6w

SPRING STEEL FOR LOCOMOTIVES, Tenders and Cars. The Subscriber is engaged in manufacturing Spring Steel from 1½ to 6 inches in width, and of any thickness required: large quantities are yearly furnished for railroad purposes, and wherever used, its quality has been approved of. The establishment being large, can execute orders with great promptitude, at reasonable prices, and the quality warranted. Address

JOAN F. WINSLOW, Agent,
Albany Iron and Nail Works,

NEW PATENT CAR WHEELS.

THE SUBSCRIBERS ARE NOW MANUFACTURING Metallic Plate Wheels of their invention, which are pronounced by those that have used them, a superior article, and the demand for them has met the most sanguine expectations of the inventors. Being made of a superior quality of Charcoal Iron, they are warranted equal to any manufacture.

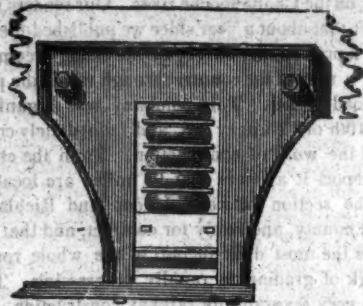
We would refer Railroad Companies and others to the following roads that have them in use. Hartford and New Haven, Connecticut River Railroad, Housatonic, Harlem, Farmington, and Stonington.

January 29, 1848. tf

SIZER & CO.
Springfield, Mass.

RAILROAD IRON AND LOCOMOTIVE

Tyres imported to order and constantly on hand
A. & G. RALSTON
4 South Front St., Philadelphia.



FULLER'S PATENT INDIA RUBBER

SPRINGS.—There can now be no ground of opposition whatever to these Springs. The Commissioner of Patents has not only rejected the application for a Patent for a similar Spring, but a Patent has just been granted for an entirely new species of India Rubber, the quality of which can be surpassed by no other kind, as the experiments which have lately been publicly made, have fully proved. No extremes of heat or cold can effect it, nor will any amount of pressure permanently alter its shape.—This Patent refutes the statement of the "New England Car Company" as to their sole right to use India Rubber.

The Spring (composed by alternate layers of India Rubber Discs and Metal Plates) is superior to any other form of Spring, for several reasons: It is the lightest—the most simple, and most durable—there being less friction in this than in any other kind; it can be regulated to any extent desired. A less quantity of rubber is required in this form to make a good spring than in any other because each disc or ring of India rubber is firmly supported by metal plates, and forms in itself a distinct spring—nor is any spiral spring required. The Patentee is consequently able to supply efficient springs at a less cost than any other parties can do. Purchasers are guaranteed in the use of these springs.

This spring has been used nearly four years with complete success. It is applicable equally to Passenger and Freight Cars, to Locomotives and Tenders. Bumpers and Draw Springs are always kept on hand, which merely require screwing to a car. It has lately been applied also to several kinds of Machines.

Action will be brought against all persons infringing upon these patents.

The subscriber will show Models and Drawings of the various modes of application to Cars, Machines, Omnibusses, etc.

G. M. KNEVITT, Agent,
Principal office, No. 78 Broad St., New York.
Branch office, Messrs. James Lee & Co's, No. 18 India Wharf, Boston.

Mr. Hale, the President of the Boston and Worcester railroad, wrote an article concerning Fuller's springs. The "New England Car Company" take the liberty of publishing that article, omitting, however, an important part; it is therefore given in full now, and the portion omitted by the New England car company is printed in italics, that the public may judge of the manner in which this "company" pervert Mr. Hale's meaning.

[From the Boston Advertiser of the 7th June.]

INDIA RUBBER SPRINGS FOR RAILROAD CARS.

"Of the numerous uses to which the wonderful elasticity and durability of India rubber, renders this material applicable, we are hardly aware of one, in which it has been more successful than in forming springs for railroad cars. We have had occasion to observe, for some months past, its application to this use, on one of the passenger cars on the Newton special train of the Boston and Worcester railroad. It is there used not only for the springs on which the car rests, but for the springs attached to the draw bar, at each end of the car, to prevent any jar on the sudden commencement, or interruption of the motion of the car. For both these purposes it appears to be admirably adapted, and we do not learn that during the period in which it has been used, any defect in it has been discovered. It renders the movements of the car extremely easy, and protects it more effectually, we think, than any other spring which we have seen in use, from every harsh or unpleasant motion, either vertical or horizontal. It is also simple in its form and application, extremely light, and little liable to get out of repair. During the period of some months in which we have seen the springs in operation, there is no apparent wear or diminution of its efficiency. Each spring is composed of several circular layers or rings of India rubber, a thin metallic plate of the same size being interposed between each of the layers. From the simplicity of its form, it cannot be expensive, and it admits of being made more or less elastic almost at pleasure. The invention, we understand, was first patented in England, where it has been introduced into general use on several of the principal railroads, and we have no doubt it will come into very extensive use in this country. The patent for this invention, we understand, has been granted to Mr. W. C. Fuller, in England and France, and also in this country. Mr. Knevelt, of New York, is the agent for the patentee in the United States, and he has established a branch office for the supply of the article in this city, as may be learned from an advertisement in another column of this paper."

NICOLL'S PATENT SAFETY SWITCH

for Railroad Turnouts. This invention, for some time in successful operation on one of the principal railroads in the country, effectually prevents engines and their trains from running off the track at a switch, left wrong by accident or design.

It acts independently of the main track rails, being laid down, or removed, without cutting or displacing them.

It is never touched by passing trains, except when in use, preventing their running off the track. It is simple in its construction and operation, requiring only two Castings and two Rails; the latter, even if much worn or used, not objectionable.

Working Models of the Safety Switch may be seen at Messrs. Davenport and Bridges, Cambridgeport, Mass., and at the office of the Railroad Journal, New York.

Plans, Specifications, and all information obtained on application to the Subscriber, Inventor, and Patentee
G. A. NICOLLS,
ja45 Reading, Pa.

WILLIAM JESSOP & SONS, CELEBRATED CAST-STEEL.

The subscribers have on hand, and are constantly receiving, from their manufactory,

PARK WORKS, SHEFFIELD,
Double Refined Cast Steel—Square, flat & octagon.
Best warranted Cast Steel—Square, flat & octagon.
Best Double and Single Shear Steel—Warranted.
Machinery Steel—Round.

Best and 2d gy. Sheet Steel—for Saws and other purposes.

German Steel—flat and sq., "W. I. & S." "Eagle" and "Goat" Stamps.

Genuine "Sykes," L Blister Steel.

Best English Blister Steel, etc., etc.

All of which are offered for sale on the most favorable terms, by WM. JESSOP & SONS,

91 John Street, New York.

Also by their Agents—
Curtis & Hand, 47 Commerce St., Philadelphia.
Alex'r Fullerton, & Co., 119 Milk St., Boston.
Stickney & Beatty, South Charles St., Baltimore.

May 6, 1848.

JAMES LAURIE, Civil Engineer.

No. 23 RAILROAD EXCHANGE, BOSTON, MASS.

Railroad Routes Explored and Surveyed. Estimates, Plans and Specifications furnished for Dams, Bridges, Wharves, and all Engineering Structures
October 14, 1848. 6m*

MASONS AND STONECUTTERS WANTED—AT THE U. S. NAVY YARD, NEAR PENSACOLA.—Twenty good Stonecutters can find immediate employment at dressing granite by the superficial foot. The beds and builds of the stone will alone be dressed—the face being left rough. For this work the high price of 25 cents per superficial foot will be allowed on the stone now in the yard, and the tools sharpened.

Those who are Masons as well as Stonecutters, will be preferred; and, more especially, those who are disposed to work, when necessary, in Diving Bells. The works in progress are very extensive, and will, probably, afford constant employment for some years.

To good workmen, of the above description, when employed by the day, the wages will be \$2.50, on the ten hour system; to which, an addition at the rate of one dollar per day will be made for such time as they may be employed in the Diving Bells. Or at the rate of \$3.50 per day.

The Diving Bells, and Machinery, are constructed on the most approved plans, and will be abundantly supplied with air and light, and the water kept low in the Bells, so that no inconvenience will be felt by the workmen, the depth being only from 25 to 30 feet.

Two good MACHINISTS can also find employment in the Navy Yard. Apply in person, to

JAMES HERRON,
Civil Engineer, Navy Yard.

Jan. 1.

10t

RAILROAD IRON.

THE TRENTON IRON COMPANY ARE now turning out one thousand tons of rails per month, at their works at Trenton, N. J. They are prepared to enter into contract to furnish rails of any pattern, and of the very best quality, made exclusively from the famous Andover iron. The position of the works, on the Delaware river, the Delaware and Raritan canal, and the Camden and Amboy railroad, enables them to ship rails at all seasons of the year. Apply to

COOPER & HEWITT, Agents,
17 Burling Slip, New York.

October 30th, 1848.

MANUFACTURE OF PATENT WIRE

Rope and Cables for Inclined Planes, Standing Ship Rigging, Mines, Cranes, Tillers etc., by
JOHN A. ROEBLING, Civil Engineer,
Pittsburgh, Pa.

These Ropes are in successful operation on the planes of the Portage Railroad in Pennsylvania, on the Public Slips, on Ferries and in Mines. The first rope put upon Plane No. 3, Portage Railroad, has now run 4 seasons, and is still in good condition. 92v11y

NORWICH CAR FACTORY,

NORWICH, CONNECTICUT.

AT the head of navigation on the River Thames, and on the line of the *Norwich and Worcester Railroad*, established for the manufacture of

RAILROAD CARS,

OF EVERY DESCRIPTION, VIZ:
PASSENGER, FREIGHT AND HAND CARS.

ALSO, VARIOUS KINDS OF

ENGINE TENDERS AND SNOW PLOUGHS.

TRUCKS, WHEELS & AXLES

Furnished and fitted at short notice.

Orders executed with promptness and despatch.

Any communication addressed to

JAMES D. MOWRY,

General Agent,

Norwich, Conn.,

Will meet with immediate attention. 178 1y25

**RIDER'S PATENT IRON BRIDGE.**

THE RIDER IRON BRIDGE having now been fully tested on the Harlem Railroad, by constant use for about eighteen months, and found to answer the full expectations of its most sanguine friends, is now offered to the public with the utmost confidence as to its great utility over any other Bridge now known.

The plan of this Bridge is to use the iron so as to obtain its greatest longitudinal strength, and at the same time is so arranged as to secure the combined principles of the Arch, Suspension and Triangle, all under such controlling power as causes each to act in the most perfect and secure manner, and at the same time impart its greatest strength to the whole work.

THE RIDER IRON BRIDGE COMPANY are prepared to furnish large quantities of Iron Bridging for Railroad or other purposes, made under the above Patent, at short notice, and at prices far more economical than the best wood structure, and on certain conditions, the first cost may be made the same as wood.

Models, and pamphlets giving full descriptions of the RIDER BRIDGE, with certificates based on actual trial from undoubted sources, will be found at the office of the Company, 74 BROADWAY, up stairs, or of W. RIDER & BROTHERS, 58 Liberty Street, where terms of contract will be made known, and where orders are solicited.

November 25, 1848.

M. M. WHITE,
Agent for the Company.

**LAP—WELDED
WROUGHT IRON TUBES**

FOR

TUBULAR BOILERS,

FROM 1 1-2 TO 8 INCHES DIAMETER.

These Tubes are of the same quality and manufacture as those so extensively used in England, Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers.

THOMAS PROSSER,

Patentee.

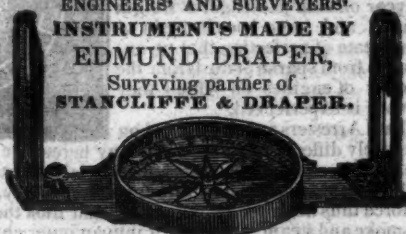
28 Platt street, New York.

ENGINEERS' AND SURVEYORS'**INSTRUMENTS MADE BY**

EDMUND DRAPER,

Surviving partner of

STANCLIFFE & DRAPER.



No 23 Pear street, 1y10 near Third, & below Walnut, Philadelphia.

RAILROAD SCALES.—THE ATTENTION of Railroad Companies is particularly requested to Ellicott's Scales, made for weighing loaded cars in trains, or singly, they have been the inventors, and the first to make platform scales in the United States; supposing that an experience of 20 years has given a knowledge and superior advantage in the business.

The levers of our scales are made of wrought iron, all the bearers and fulcrums are made of the best cast steel, laid on blocks of granite, extending across the pit, the upper part of the scale only being made of wood. E. Ellicott has made the largest Railroad Scale in the world, its extreme length was one hundred and twenty feet, capable of weighing ten loaded cars at a single draft. It was put on the Mine Hill and Schuylkill Haven Railroad.

We are prepared to make scales of any size to weigh from five pounds to two hundred tons.

ELLICOTT & ABBOTT.

Factory, 9th street, near Coates, cor. Melon st.

Office, No. 3 North 5th street, Philadelphia, Pa.

CAR MANUFACTORY,
CINCINNATI, OHIO.

KECK & DAVENPORT WOULD RESPECTFULLY call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to different points speedy and economical. They are prepared to execute to order, on short notice, Eight-Wheeled Passenger Cars of the most superior description, Open and Covered Freight Cars, Four or Eight-Wheel Crank and Lever Hand Cars, Trucks, Wheels and Axles, and Railroad Work generally. Cincinnati, Ohio, October 2, 1848. 411t

RAILROAD IRON.

THE MOUNT SAVAGE IRON WORKS, Allegheny County, Maryland, having recently passed into the hands of new proprietors, are now prepared, with increased facilities, to execute orders for any of the various patterns of Railroad Iron. Communications addressed to either of the subscribers will have prompt attention.

J. F. WINSLOW, President

Mount Savage Iron Co., Troy, N. Y.

ERASTUS CORNING, Albany

WARREN DELANO, Jr., N. Y.

JOHN M. FORBES, Boston

ENOCH PRATT, Baltimore, Md.

November 6, 1848.

THE NEWCASTLE MANUFACTURING

Company continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack screws, Wrought iron work and Brass and Iron castings, of all kinds connected with Steamboats, Railroads, etc.; Mill Gearing of every description; Cast wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars, Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.

ANDREW C. GRAY,
President of the Newcastle Manuf. Co.

DIRECT ACTION ENGINES FOR STEAMBOATS.

THE PATENT DOUBLE CYLINDERS,

AND ALSO

THE ANNULAR RING PISTON ENGINES, of Messrs. Maudslay, Sons & Field, of London, may be built in the United States, under license, which can be obtained of their agent,

THOMAS PROSSER, C. E.,
36 Platt street, New York.

May 6, 1848.

PATENT HAMMERED RAILROAD, SHIP and Boat Spikes. The Albany Iron and Nail Works have always on hand, of their own manufacture, a large assortment of Railroad, Ship and Boat Spikes, from 2 to 12 inches in length, and of any form of head. From the excellence of the material always used in their manufacture, and their very general use for railroads and other purposes in this country, the manufacturers have no hesitation in warranting them fully equal to the best spikes in market, both as to quality and appearance. All orders addressed to the subscriber at the works, will be promptly executed. JOHN F. WINSLOW, Agent.

Albany Iron and Nail Works, Troy, N. Y.
The above spikes may be had at factory prices, of Erastus Corning & Co., Albany; Hart & Merritt, New York; J. H. Whitney, do.; E. J. Etting, Philadelphia; Wm. E. Coffin & Co., Boston. ja45

TO RAILROAD COMPANIES AND BUILDERS OF MARINE AND LOCOMOTIVE ENGINES AND BOILERS.

FASCAL IRON WORKS.

WELDED WROUGHT IRON TUBES

From 4 inches to 4 in calibre and 2 to 12 feet long, capable of sustaining pressure from 400 to 2500 lbs. per square inch, with Stop Cocks, T, L, & other fixtures to suit, fitting together with screw joints, suitable for STEAM, WATER, GAS, and for LOCOMOTIVE and other STEAM BOILER FLUES.



Manufactured and for sale by
MORRIS, TASKER & MORRIS,
Warehouse E. E. Corner of Third & Walnut Streets
PHILADELPHIA.

FAIRBANKS' RAILROAD SCALES.

THE Subscribers are prepared to construct at short notice, Railroad and Depot Scales, of any desired length and capacity. Their long experience as manufacturers—their improvements in the construction of the various modifications, having reference to strength, durability, retention of adjustment, accuracy of weight and despatch in weighing—and the long and severe tests to which their scales have been subjected—combine to ensure for these scales the universal confidence of the public.

No other scales are so extensively used upon Railroads, either in the United States or Great Britain; and the manufacturers refer with confidence to the following in the United States.

| | |
|-----------------------------|---------------------------|
| Eastern Railroad, | Boston and Maine R. R., |
| Providence Railroad, | Providence & Wor. R.R., |
| Western Railroad, | Concord R. R., |
| Old Colony Railroad, | Fitchburg R. R., |
| Schenectady Railroad, | Syracuse and Utica R. R., |
| Baltimore & Ohio Road, | Baltimore & Susq. R. R., |
| Phila. & Reading Road, | Schuylkill Valley R. R., |
| Central (Ga.) Railroad, | Macon and Western R.R., |
| New York and Erie Railroad; | |

and other principal Railroads in the Western, Middle and Southern States.
E. & F. FAIRBANKS & CO.
St. Johnsbury, Vt.
Agents: FAIRBANKS & Co., 81 Water st. N. York.
A. B. NORRIS, 196 Market st., Philad.
April 22, 1848. ly17

RAILROAD IRON—2500 TONS HEAVY H Rail, now landing, and expected shortly to arrive, for sale on most favorable terms by
DAVIS BROOKS & CO.

July 19th, if 68 Broad street, New York.

ENGINE AND CAR WORKS.

DAVENPORT & BRIDGES

HAVING ASSOCIATED WITH THEM

MR. LEWIS KIRK, OF READING, PA.,

And recently enlarged their Establishment, (making it now the most extensive in the United States,) they are prepared to manufacture to order Locomotive Engines and Cars of every description. Stationary Engines, Steam Hammers, Boilers, and all kinds of Railroad Machinery. Also, Castings, and Forge Irons of all kinds—including Chilled Wheels, Frogs, Chairs, Switches, Car Axles, and Locomotive Cranks, Connecting Rods, Steel Springs, Bolts, etc., etc. Orders from all parts of the country solicited for Engines or Cars, or any part or parts of the same. All orders will be furnished at short notice, and on as good terms as any manufactory in the country. Coaches pass our works every fifteen minutes during the day from Brattle street, Boston.

DAVENPORT, BRIDGES & KIRK.

Cambridgeport, Mass., February 16th, 1849.

THE SUBSCRIBERS ARE PREPARED TO execute orders at their Phoenix Works for Railroad Iron of any required pattern, equal in quality and finish to the best imported.

REEVES, BUCK & CO.,
Philadelphia.

ROBERT NICHOLS, Agent,
No. 79 Water St., New York.

96tf

RAILROAD IRON, PIG IRON, ETC.

600 Tons of T Rail 60 lbs. per yard.

25 Tons of 2½ by ½ Flat Bars.

25 Tons of 2½ by 9-16 Flat Bars.

100 Tons No. 1 Gartshrie.

100 Tons Welsh Forge Pigs.

For Sale by A. & G. RALSTON & CO.

No. 4 So. Front St., Philadelphia

FRENCH AND BAIRD'S PATENT SPARK ARRESTER.

TO THOSE INTERESTED IN Railroads, Railroad Directors and Managers are respectfully invited to examine an improved Spark-Arrester recently patented by the undersigned.

Our improved Spark Arresters have been extensively used during the last year on both passenger & freight engines, and have been brought to such a state of perfection that no annoyance from sparks or dust from the chimney of engines on which they are used is experienced.

These Arresters are constructed on an entirely different principle from any heretofore offered to the public. The form is such that a rotary motion is imparted to the heated air, smoke and sparks passing through the chimney, and by the centrifugal force thus acquired by the sparks and dust they are separated from the smoke and steam, and thrown into an outer chamber of the chimney through openings near its top, from whence they fall by their own gravity to the bottom of this chamber; the smoke and steam passing off at the top of the chimney, through a capacious and unobstructed passage, thus arresting the sparks without impairing the power of the engine by diminishing the draught or activity of the fire in the furnace.

These chimneys and arresters are simple, durable and neat in appearance. They are now in use on the following roads, to the managers and other officers of which we are at liberty to refer those who may desire to purchase or obtain further information in regard to their merits.

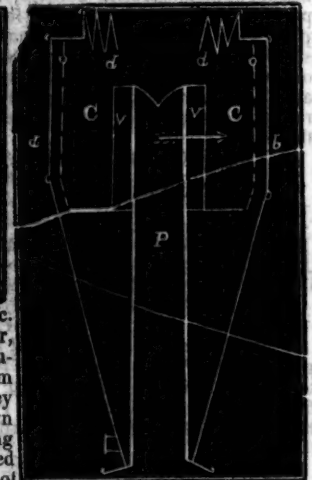
R. L. Stevens, President Camden and Amboy Railroad Company; Richard Peters, Superintendent Georgia Railroad, Augusta, Ga.; G. A. Nicolls, Superintendent Philadelphia, Reading and Pottsville Railroad, Reading, Pa.; W. E. Morris, President Philadelphia, Germantown and Norristown Railroad Company, Philadelphia; E. B. Dudley, President W. and R. Railroad Company, Wilmington, N. C.; Col. James Gadsden, President S. C. and C. Railroad Company, Charleston, S. C.; W. C. Walker, Agent Vicksburgh and Jackson Railroad, Vicksburgh, Miss.; R. S. Van Rensselaer, Engineer and Sup't Hartford and New Haven Railroad; W. R. M'Kee, Sup't Lexington and Ohio Railroad, Lexington, Ky.; T. L. Smith, Sup't New Jersey Railroad Trans. Co.; J. Elliott, Sup't Motive Power Philadelphia and Wilmington Railroad, Wilmington, Del.; J. O. Sterns, Sup't Elizabethtown and Somerville Railroad; R. R. Cuyler, President Central Railroad Company, Savannah, Ga.; J. D. Gray, Sup't Macon Railroad, Macon, Ga.; J. H. Cleveland, Sup't Southern Railroad, Monroe, Mich.; M. F. Chittenden, Sup't M. P. Central Railroad, Detroit, Mich.; G. B. Fisk, President Long Island Railroad, Brooklyn.

Orders for these Chimneys and Arresters, addressed to the subscribers, care Messrs. Baldwin & Whitney, of this city, will be promptly executed.

N. B.—The subscribers will dispose of single rights, or rights for one or more States, on reasonable terms.

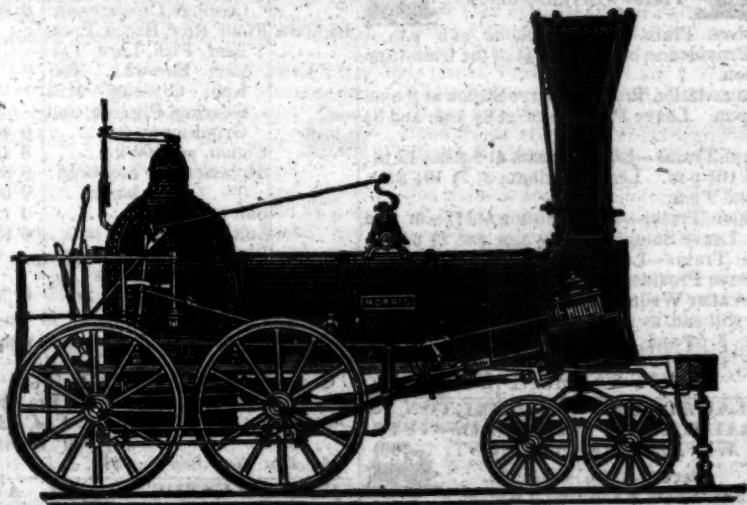
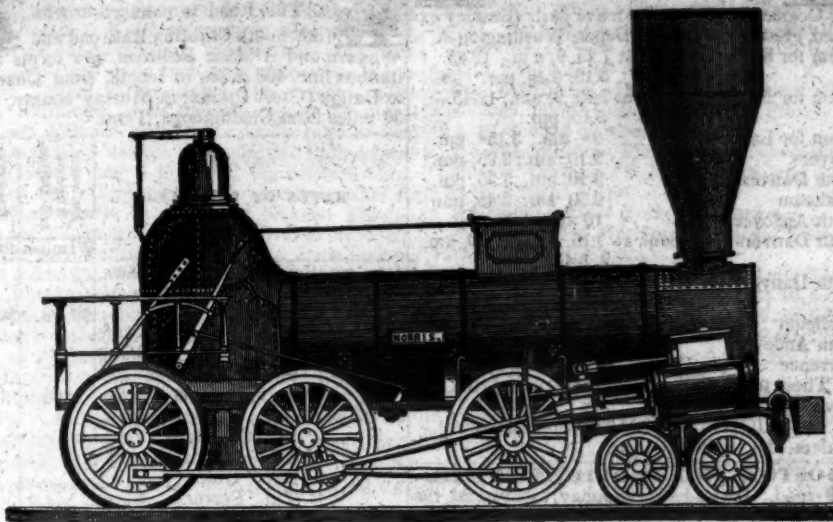
The letters in the figures refer to the article given in the Journal of June, 1844.

ja45



NORRIS' LOCOMOTIVE WORKS.

BUSHHILL, SCHUYLKILL SIXTH-ST., PHILADELPHIA.



THE UNDERSIGNED Manufacture to order Locomotive Steam Engines of any plan or size. Their shops being enlarged, and their arrangements considerably extended to facilitate the speedy execution of work in this branch, they can offer to Railway Companies unusual advantages for prompt delivery of Machinery of superior workmanship and finish.

Connected with the Locomotive business, they are also prepared to furnish, at short notice, Chilled Wheels for Cars of superior quality.

Wrought Iron Tyres made of any required size—the exact diameter of the Wheel Centre, being given, the Tyres are made to fit on same without the necessity of turning out inside.

Iron and Brass castings, Axles, etc., fitted up complete with Trucks or otherwise.

NORRIS' BROTHERS.

MACHINE WORKS OF ROGERS, Ketchum & Grosvenor, Patterson, N. J. The undersigned receive orders for the following articles, manufactured by them of the most superior description in every particular. Their works being extensive and the number of hands employed being large, they are enabled to execute both large and small orders with promptness and despatch.

Railroad Work.

Locomotive steam engines and tenders; Driving and other locomotive wheels, axles, springs & flange tires; car wheels of cast iron, from a variety of patterns, and chills; car wheels of cast iron with wrought tires; axles of best American refined iron; springs; boxes and bolts for cars.

Cotton, Wool and Flax Machinery of all descriptions and of the most improved patterns, style and workmanship.

Mill gearing and Millwright work generally; hydraulic and other presses; press screws; callenders; lathes and tools of all kinds; iron and brass castings of all descriptions.

ROGERS, KETCHUM & GROSVENOR, Paterson, N. J., or 60 Wall street, N. York.

T. & C. WASON, Manufacturers of every style of Freight and Baggage Cars.—Forty rods east of the depot, Springfield, Mass.

Running parts in sets complete, Wheels, Axles, or any part of cars furnished and fitted up at short notice and in the best manner.

N.B. Particular attention paid to the manufacture of the most improved Freight Cars. We refer to the New Haven, Hartford and Springfield; Connecticut River; Harlem; Housatonic, and Western, Mass., Railroads, where our cars are now in constant use.

Dec. 25, 1847.—1y.

RAILROAD IRON.

3000 TONS, ABOUT 60 LBS. PR lineal yard—deliverable early in the Spring, and of undoubted quality, can be contracted for at a low rate. For sale by

DAVIS, BROOKS & CO.,

68 Broad street.

New York, Sept. 16, 1848.

Also on hand—1000 Tons best quality Rails.

CHILLED RAILROAD WHEELS.—THE undersigned are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of Spokes or Disks, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the hubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,

Willow St. below 13th,

Nov. 10, 1847. [tf.] Philadelphia, Penna.

TO LOCOMOTIVE AND MARINE ENGINE BOILER BUILDERS. Pascal Iron Works, Philadelphia. Welded Wrought Iron Flues, suitable for Locomotives, Marine and other Steam Engine Boilers, from 2 to 5 inches in diameter. Also, Pipes for Gas, Steam and other purposes; extra strong Tube for Hydraulic Presses; Hollow Pistons for Pumps of Steam Engines, etc. Manufactured and for sale by

MORRIS TASKER & MORRIS,

Warehouse S. E. corner 3d and Walnut Sts., Philadelphia 11

TO RAILROAD COMPANIES AND MANUFACTURERS of railroad Machinery. The subscribers have for sale Am. and English bar iron, of all sizes; English blister, cast, shear and spring steel; Juniata rods; car axles, made of double refined iron; sheet and boiler iron, cut to pattern; tiers for locomotive engines, and other railroad carriage wheels, made from common and double refined B. O. iron; the latter a very superior article. The tires are made by Messrs. Baldwin & Whitney, locomotive engine manufacturers of this city. Orders addressed to them, or to us, will be promptly executed.

When the exact diameter of the wheel is stated in the order, a fit to those wheels is guaranteed, saving to the purchaser the expense of turning them out inside.

THOMAS & EDMUND GEORGE,

445 N. E. cor. 12th and Market sts., Philad., Pa.

LAWRENCE'S ROSENDALE HYDRAULIC CEMENT. This cement is warranted equal to any manufactured in this country, and has been pronounced superior to Francis' "Roman." Its value for Aqueducts, Locks, Bridges, Floors and all Masonry exposed to dampness, is well known, as it sets immediately under water, and increases in solidity for years.

For sale in lots to suit purchasers, in tight papered barrels, by JOHN W. LAWRENCE, 142 Front street, New York.

Orders for the above will be received and promptly attended to at this office. 32 1y

RAILROAD IRON.

THE Undersigned are prepared to Contract for the delivery of ENGLISH RAILROAD IRON, of favorite brands, during the Spring. They also receive orders for the importation of Pig, Bar, Sheet, etc., Iron.

THOMAS B. SANDS & Co.

22 South William-Street.

Feb. 3rd.

New York.

DEAN, PACKARD & MILLS,

MANUFACTURERS OF ALL KINDS OF

RAILROAD CARS,

SUCH AS

PASSENGER, FREIGHT AND CRANK CARS,

— ALSO —

SNOW PLOUGHS AND ENGINE TENDERS OF VARIOUS KINDS.

CAR WHEELS and AXLES fitted and furnished at short notice; also, STEEL SPRINGS of various kinds; and

SHAFTING FOR FACTORIES.

The above may be had at order at our Car Factory,

REUEL DEAN,

ELIJAH PACKARD,

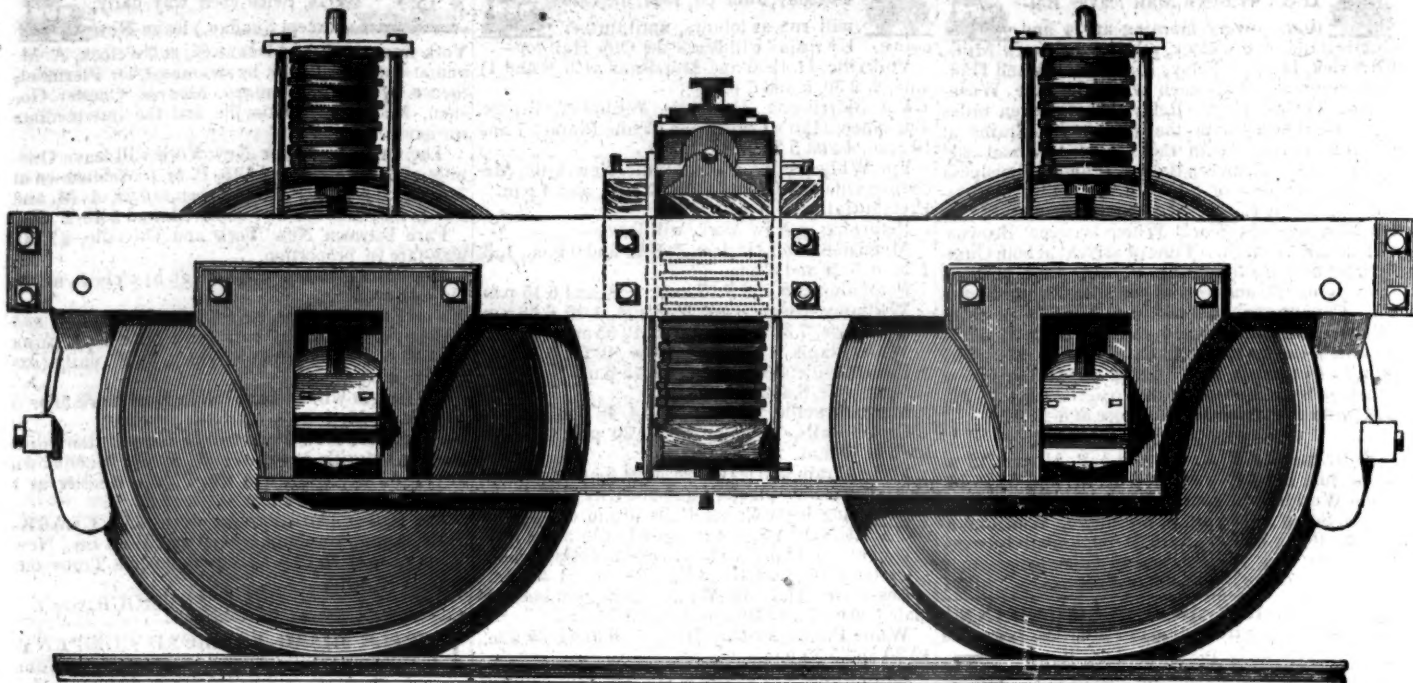
ISAAC MILLS,

SPRINGFIELD, MASS.

1748

FOWLER M. RAY'S

METALLIC INDIA RUBBER CAR SPRINGS.



THE NEW ENGLAND CAR COMPANY have introduced these Springs, and they are now in operation on every Railroad terminating in Boston, and several others in New England and the Middle States. Their qualities are well understood, or may be readily ascertained by every person interested to know them. They require no recommendation from the Company. The only known compound of India Rubber good for anything for this purpose is the Vulcanized India Rubber, invented by Charles Goodyear, of New Haven, and the application of it, and the form in which it is used, were invented by F. M. Ray, of New York. The right to manufacture and sell the substance itself for the purpose of Railroad Carriage Springs, as well as the form and application of it, are held exclusively by the New England Car Company. No other company, or individual, has any right to sell or use it for such purpose, or has attempted so to use it in this country.

The New England Car Company guarantee the right to use the article they sell for Railroad Carriage Springs only against all adverse rights, whether under patents or otherwise; and all persons and corporations are cautioned against a similar use of the article, when purchased of any other parties.

The Springs they sell are all manufactured in a uniform manner, and under the immediate inspection of their own Agent, and have been proved and known to answer the purpose. None have been manufactured in this country, or imported from abroad, beside their own, which would at all answer the purpose; and if any such should be produced, it cannot be used for Car Springs, while Goodyear's patents, and the rights of the New England Car Company under them, remain in force.

The New England Car Company are now prepared to answer orders for all that may be called for, on reasonable notice, and uniform and equitable terms. They invite the most careful examination, and the severest scrutiny, into the merits of their Springs, wherever they have applied them. And if after such examination, your Company should judge it for their interest to adopt them, the N. E. Car Company would respectfully invite the patronage which they think they deserve, and are confident of receiving at your hands.

EDWARD CRANE, Agent,

Office 99 State street,

Orders may also be left with WM. RIDER & BROTHERS, No. 59 Liberty street, New York, or with F. M. RAY, Agent, 100 Broadway, N. Y.

The following article, from the pen of Mr. HALE, the president of the Boston and Worcester Railroad, expresses his opinion of this important improvement, as published in the Boston Daily Advertiser of June 7, 1848. He says:

"Of the numerous uses to which the wonderful elasticity and durability of India Rubber renders this material

applicable, we are hardly aware of one in which it has been more successful than in forming springs for railroad cars. We have had occasion to observe, for some months past, its application to this use, on one of the passenger cars on the Newton special train of the Boston and Worcester railroad. It is there used, not only for the springs on which the car rests, but for the springs attached to the draw bar at each end of the car, to prevent any jar on the sudden advance or interruption of the motion of the car. For both these purposes it appears to be admirably adapted, and we do not learn, that during the period in which it has been used, any defect in it has been discovered. It renders the movements of the car extremely easy, and protects it more effectually, we think, than any other spring which we have ever seen in use, from very harsh or unpleasant motion, either vertical or horizontal. It is simple in its form and application, extremely light, and little liable to get out of repair. During the period of some months, in which we have seen the springs in operation, there is no apparent wear or diminution of their efficacy."

The above statement of Mr. Hale agrees with my own observation in all particulars.

WM. PARKER, Supt. B. & W. R. R.

June 8, 1848.

I fully concur in the foregoing statement, from practical observation of its use for the last 5 months, on the Boston and Worcester railroad corporation cars.

D. N. PICKERING, Jr.,

Supt. Car Building, B. & W. R. R.

Boston, June 10, 1848.

The New England Car Company have introduced their Vulcanized India Rubber Car Springs on the roads with which we are respectively connected, and we fully concur with Mr. Hale in the above opinion of their character and properties.

DAVENPORT & BRIDGES, Car Builders.

BRADLEY & RICE, Car Builders.

Boston, June, 1848.

PIG AND BLOOM IRON.—THE SUBSCRIBERS are agents for the sale of numerous brands of Charcoal and Anthracite Pig Iron, suitable for Machinery, Railroad Wheels, Chains, Hollowware, etc. Also several brands of the best Puddling Iron, Juniata Blooms suitable for Wire, Boiler Plate, Axe Iron, Shovels, etc. The attention of those engaged in the manufacture of Iron is solicited by

A. WRIGHT & NEPHEW,

Vine St. Wharf, Philadelphia.

BACK VOLUMES OF THE RAILROAD JOURNAL for sale at the office No. 98 Nassau street.

LAP-WELDED WROUGHT IRON TUBES for Tubular Boilers, from 1½ to 15 inches diameter, and any length not exceeding 17 feet—manufactured by the Caledonian Tube Company, Glasgow, and for sale by

IRVING VAN WART,

12 Platt street, New York.

JOB CUTLER, Patentee.

These Tubes are extensively used by the British Government, and by the principal Engineers and Steam Marine and Railway Companies in the Kingdom.

281f

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia. Jan. 20, 1849.

AMERICAN RAILROAD JOURNAL.

PUBLISHED BY J. H. SCHULTZ & CO.

NOS. 9 & 10 PRIME'S BUILDINGS,

(THIRD FLOOR,)

54 WALL STREET,

NEW YORK CITY.

TERMS.—Five Dollars a year, in advance.

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LETTERS and COMMUNICATIONS for this Journal may be directed to the Editor,

HENRY V. POOR, 54 WALL ST.